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SIGNIFICANCE OF PRE-1753 BOTANICAL EXPLORATIONS IN
TEMPERATE NORTH AMERICA ON LINNAEUS' FIRST EDITION
OF SPECIES PLANTARUM

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INTRODUCTION

When Carl Linnaeus published the first edition of *Species plantarum* in 1753 he discussed some 889 species of vascular plants from temperate North America, here defined as the present-day continental United States and Canada. The information relative to these plants came from the efforts of men and women who either visited the New World or who lived there and collected plants as amateur or professional naturalists.

In a few instances they were gentlemen correspondents of Linnaeus' or were men in Europe who never traveled but supplied Linnaeus with collections sent by others. A few were chance collectors, some gathered plants as a hobby, and others to gain political favors. Occasionally a collector was a person trained in medicine and used that knowledge to search for promising plants that might be used in the treatment of maladies. More often collectors were members of the clergy who collected potentially important horticultural plants for their gentlemen supporters in Europe. This led not only to the discovery of many important ornamental trees and shrubs, but many New World plants of agricultural import-

ance. The early Spanish explorators discovered a rich array of grains, fruits and vegetables that eventually found use in European culture and cuisine. The more notable were maize, potato, tomato, various squashes and of course a non-food plant, tobacco.

The early explorers who ventured into the New World were mainly interested in the riches of gold and silver. Even though natural history was of relatively minor concern, surprising numbers of books were published treating the native flora and fauna of the newly discovered lands. In 1526, Oviedo y Valdes published a book on the natural history of the West Indies based on his own observations in the Caribbean and Central America. Nicolas Monardes who never left Europe, published his book, in parts, on the natural history of the New World from 1569 to 1574. Both men were knowledgeable physicians and as such were particularly interested in medicinal plants and their local uses. Monardes' book was rewritten and published in Latin by Carolus Clusius in 1574. John Frampton translated that work into English and published it in 1577.

The exotic vegetation of the new lands across the ocean

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proved exciting to the European naturalists, and a source of considerable confusion. Species somewhat similar to those in Europe which proved to be useful were often considered to be the same species, even if they were not, so as to encourage their use in the medical trade. Plants which were the same, but were of no use or interest to the European physicians, were either ignored or taken to be a different species. It is well to remember that in the late 1500s, the concept of species was essentially that proposed by the ancient Greeks, chiefly Pliny, and the unique New World species were proving difficult to fit into Pliny's scheme of the vegetable kingdom.

Plants which were of potential economic importance were sometimes ignored or not used by the Europeans. Maize was not used extensively in Europe as a table food, and is even today largely considered an animal fodder. Potato was not considered fit for the tables of the aristocratic, and was shunted off to the slaves of the New World or the poor of Europe. For some economically important plants, tradition indicated they were poisonous such as was the case with the tomato up to the end of the last century. Some plants, because they were used by the "heathens", were considered unchristian for if God had intended christians to have such foods, they would be found in Europe!

Jose d'Acosta, a missionary, lived in Peru from 1569 to 1588. His notes originally were published in 1589 and then expanded into a four-volume work in 1590. These volumes were translated into French, Flemish and German around 1600, and then into English in 1604. His exact

observations are still a major source of information on the uses of plants by the native people of South America. d'Acosta, like Ovieda and Monardes, talked of maize, cassava and potato among other species. He also noted the heavy use of chili peppers, and reported that the Peruvian Indians were exceedingly fond of garlic which had been introduced into the New World by the Europeans. He called attention to the fine grapes in the New World, and introduced several kinds into Europe.

Collectors to temperate North America came only a few years after those that visited the more tropical regions. Early French explorers gathered plants and sent seeds and fruits back to France where they were soon flourishing in the gardens. Many of these species were gathered in what is today southeastern Canada. There was a desire on the part of the French to introduce plants not only of medicinal but of potential horticultural value as well. Many temperate conifers and hardwoods were ideally suited to the French climate and quickly were adopted, unlike the more tropical species.

By the start of the 17th century interest in plants was beginning to slowly move away from the rigidness of the Dark Ages and into a more enlightened period. The nearly 500 species of plants described by Dioscorides in his work on *materia medica* were destined to give way to over 6000 species in the works of the Bauhin brothers, and especially Gaspard Bauhin. They described several new species from the New World in 1623. The great philosophical barrier of Old World versus New World speciation had finally been broken, and with that restriction lifted, the urge to

search and discover new plants from all corners of the world began to be felt by botanists and explorers.

As the 17th century began some 50 species of North American plants were known from cultivation in European gardens. The concept of the botanical garden, begun in Venice in 1545, was rapidly becoming the fashion, and soon no medical school was complete without a rich and varied garden of medicinal plants. Botanical gardens were established in England and France by the start of the 1600s, and with them came the beginnings of a golden age of botanical exploration throughout the world.

THE GARDEN CURIOSITIES

During the first half of the 17th century, botanical explorations in temperate North America were restricted to individuals who, from time to time, gathered seeds. Little concern was given to the preservation of dried voucher specimens, and almost none to recording the details of geographical location, plant association or similar information. John Tradescant the Younger came to Virginia in 1637 and collected plants along the York River. The purpose of his trip was to gather novelties for his natural history museum, known as Tradescant's Ark, which he and his father had established at Lambeth in London. Tradescant brought to England such species as the tulip tree, *Liriodendron tulipifera*, the red maple, *Acer rubrum*, sycamore, *Platanus occidentalis*, black walnut, *Juglans nigra*, and the bald cypress, *Taxodium distichum*. Although herbarium specimens of these species were not made in Virginia by Tradescant, various collectors in later years made voucher spec-

imens of John Tradescant's original introductions. These specimens are still extant and may be examined in the Sloane Herbarium at the British Museum (Natural History) in London. The museum specimens shown in Tradescant's Ark were eventually obtained by Elias Ashmole, and they became a part of the Ashmolean Museum, and are now a part of the University of Oxford Museum at Oxford, England.

To be sure the early discoveries of temperate North American plants were finding their way into the literature. As already mentioned, Gaspard Bauhin reported several in 1623. However, many were also described, illustrated and evaluated by herbalists. Maize and other New World plants were well known to European naturalists early in the 16th century, and a number of herbals contain illustrations of these species. The tradition of herbals was slowly being replaced by works of botany more concerned with the classification and identification of species, and less so with the medicinal uses of plants. Nonetheless, John Parkinson, the last of the English herbalist, was destined to describe several American species in his 1640 herbal, *Theatricum botanicum*. Plants reportedly found originally in Canada, New England and Virginia were included in Parkinson's book.

As for the Canadian references, Parkinson took most of his information from Jacques Philippe Cornuti's *Canadensis plantarum* published in 1635. This book described species of plants found in cultivation in and around Paris. A total of 68 species were described, but only 38 were from Canada or the New England area. Cornuti's book was the most scientific effort yet produced devoted to New

World botany, and nearly all of the 38 copper plate illustrations of Canadian plants executed by Cornuti were ultimately cited by Linnaeus when he wrote the first edition of *Species plantarum* in 1753. Linnaeus referred to Parkinson's book also, but much less frequently than Cornuti's.

Before leaving this period Thomas Hariot, friend and mentor of Sir Walter Raleigh, must be mentioned. Hariot came to Virginia in the 1580s and described what he found in a famous pamphlet published in 1588. Entitled "A briefe and true report of the new found land of Virginia", his remarks are valuable because of the detail he devotes to the forest resources and medicinal plants. He describes the native uses of grapes, beans, potatos, melons, sunflowers, tobacco, and a wide variety of small grains including oats, barley and what he called wheat. Hariot reported on the several different kinds of acorns used by the Indians as well as walnuts, strawberries, mulberries and crab apples. Among the identifiable trees were species of oak, elm, ash, walnut, fir, juniper, maple, witch hazel, willow, beech, sassafras and pines. Hariot's report on Virginia -- which was also based on observations made in North Carolina -- was an exceedingly glowing one, and while not consulted by Linnaeus, it is of interest today for its early information on plant ecology and ethnology.

There were many other similar publications on the general aspects of the flora of temperate North America published by travelers prior to the 1680s. Most were in the vein of Hariot's. To Linnaeus they were of little or no interest. Even to contemporary naturalists they

were little more than descriptive catalogues of vague but wonderous species of plants which may or may not have much of a factual basis in reality. In many cases such publications were "flowery" so as to attract colonists to the New World. To the English, however, there was no question that great botanical treasures awaited discovery in the New World and that skilled and knowledgable men were needed to survive the rigors of the new lands. The rapid growth of scientific organizations and thought in England and France was fomenting desires to explore, discover, and to answer questions about nature.

After the establishment of the Oxford Club in 1648, other scientific organizations were soon formed. Upon the final restoration of the Stuart monarchy in 1660, the Royal Society of London was established. This was, at least by modern standards, the first truly scientific organization in England. The first twenty years of the organization was a period of maturing and promoting scientific endeavors in various parts of the world, including the subtropical and tropical regions of the New World.

The growth of botanical gardens in Europe was significant during the last half of the 17th century. What initially had begun only as a desire of the nobility to possess exotic plants and animals from strange new lands soon escalated beyond the royal estates and gardens into the homes and estates of not only the more wealthy families of Europe, but even to the gardens of the common people. The exploration of the new lands across the sea, in Africa, the New World, and the Far East was creating new wealth. These new men of means were often

well educated, skilled in the arts, and were impressed by exotica acquired by of their fellows. They were also willing to associate with persons of ability, be they in art or literature, or persons trained as natural philosophers interested in the classification and identification of vascular plants. With the growth of botanical gardens, the craze for exotic garden plants increased, and friendships with knowledgeable botanists soon became paramount for nearly every gentlemen of means who wished to have a well-curated cabinet of natural objects. The classifiers and identifiers of plants suddenly became highly esteemed in the gentlemen's circle of close friends.

The Royal Society of London provided a common meeting place for scholars, noblemen and men of means. The union was perfect for land was needed for gardens, money and connections were needed to provide the means to obtain plants. What better a relationship to foster than that between the hopeful botanist, the newly established exporter of foreign curiosities, and the landed gentry who wished to have the exotics in their garden?

With the beginning of efforts to prepare a detailed review of the plants of the world, especially by English workers such as John Ray and Robert Morison, to say nothing of other workers in Europe, the need for more collectors in temperate North America grew. More and more members of the Royal Society began to call for an expedition to North America. Finally, it was decided to fund an expedition and a search was begun to find a suitable naturalist. The results produced John Banister.

THE VIRGINIA BEGINNINGS

John Banister was born in 1650 and educated at Magdalen College at the University of Oxford where he received his B.A. in 1671 and his M.A. in 1674. He continued to serve the University after graduation, first as a clerk and then as a chaplain. At Oxford he met Dr. Robert Morison, the University's botany professor, and came to know the Bishop of London, Dr. Henry Compton, a noted gardener and botanical enthusiast. Under the guidance of these two men, Banister began to botanize and make collections of dried plants in the Oxford area. His skills soon manifested themselves, and Compton encouraged Banister to accept a ministerial position in Virginia. His duties included collecting objects of natural history while serving the needs of the Church of England.

Banister accepted the position and left for Virginia in 1678 under the sponsorship of a number of members of the Royal Society. William Byrd I of Virginia, served as treasurer of this group.

At first Banister stayed with Byrd at James River Falls and then at Westover, the Byrd estate. Not only did Banister send back to England a large number of seeds, fruits, dried specimens, and illustrations of native plants, he also received plants from England and plant them in Virginia. The European plants were coming from Jacob Bobart, the gardener at the University of Oxford, who, altogether with his father, served the University for over 60 years.

Financial support for Banister's efforts was never really substantial. His English patrons included such men as Dr. Hans Sloane, Dr. Henry

Compton, Dr. Martin Lister, Robert Morison, Jacob Bobart, George London, James Petiver and others, but none seemed capable of providing him with sufficient funding so that he could devote his full efforts to botanical explorations in Virginia.

In the 1680s, Banister entered into a lively correspondence with John Ray, and sent to him a large number of plant specimens. At the same time Banister was also providing specimens to a second major English botanist, Leonard Plukenet, Ray's rival. Ray took a catalogue of Virginia plants sent to him by Banister and published it is 1688 as an appendix to his second volume of *Historia plantarum*. Plukenet, on the other hand, took his Banister specimens, and in particular the Banister illustrations, and began to publish the figures in 1691, and a series of new scientific names (polynomials) in his first book, *Almagestum botanicum*, published in 1696.

To a degree Banister was depressed by these publishing activities. He himself began preparing manuscripts with the idea of publishing his findings under his own name. His previous attempts to publish his own works had failed for whenever he sent a manuscript to Europe, it was taken and published by others under their own name. Morison, Ray and Plukenet were all guilty of this, from time to time, but without their efforts to present the Virginian discoveries at once, others, especially workers in France and Holland, would have described the species anyway when they observed the uniqueness of the plants in their garden.

In spite of John Banister's difficulties, his fortunes changed somewhat when he

married a wealth widow, and suddenly found a ready source of modest support. In addition, his station in Virginia was changing, and while still a minister, he accepted other duties and these often kept him out-of-doors collecting plants. Soon, the number of Virginia plants Banister sent to England surpassed 300 species, and was destined to reach about 340 species of vascular plants, 100 insects and about 20 mollusks before a rifle ball ended his life in an accidental shooting while he was out botanizing. The year was 1692, and his passing would close the opening period of temperate North American botany.

To Morison, Bobart, Ray and Plukenet, the collections of John Banister were the mainstay of their knowledge of temperate North American botany. Bobart took up the writing of Morison's *Plantarum historiae universalis oxoniensis* when Morison died in 1683, and began to describe and illustrate Banister species based on a combination of garden-grown material raised at Oxford and herbarium specimens. Banister's catalogue, which was published by Ray in 1688, was not illustrated, but Plukenet's books were illustrated. Unlike Bobart, however, Plukenet based his illustrations almost entirely upon herbarium specimens or figures executed by Banister which Plukenet obtained. Between these men, and others, notable Joseph Pitton de Tournefort in France and Paul Hermann of Leyden, Banister's plants were rapidly described and characterized.

Of perhaps even greater importance were the many species of vascular plants Banister introduced into western Europe. He left a legacy of exotic trees, shrubs and herbs

which generations of naturalists in the future would examine in even greater detail. Linnaeus would not only see and grow many of the Virginia species introduced into Europe by Banister, but would come to acknowledge Banister as an important collector of temperate North American species.

THE BOTANY CLUB

The death of John Banister was a serious blow to English botany and its attempt to classify temperate North American plants and to obtain seeds and fruits to introduce such species into cultivation. The loss of Banister produced a significant gap in the active program of plant explorations in the British colonies of North America, and it was immediately agreed that a new person had to be found to replace him.

The Royal Society had been growing, expanding and changing over the three decades from its foundation in 1660 to 1690. A new generation of men were coming into power within the Society, and even within English society as well. Among the leaders of this new group was Hans Sloane. Sloane was a physician who had gone to the New World with the new Royal Governor of Jamaica, the Duke of Albemarle. He left England in September of 1687 and returned in late May of 1689 laden with several hundred new plants. Within a short period of time, Sloane increased significantly his knowledge of botany by studying with Tournefort and Magnol in France, and by working on his own collections. Sloane soon obtained a number of Royal appointments including physician to Her Majesty the Queen, and established a large and profitable practice. Sloane married a wealth widow, whom he likely met in Jamaica,

and was soon in a position to devote much of his time to the gathering of curiosities from throughout the world. Sloane would also rise to power in the Royal Society, holding the important post of treasurer which saw to the publication of the *Philosophical Transactions*, the scientific journal of the Society. It was due to Sloane that the journal saw a significant rise in the number of papers dealing with botany. All in all, Sloane would live for 93 years, dying in 1753. In the years of his activities in the natural sciences, Sir Hans Sloane would obtain the largest collection of objects in the world, and because he lived so long, was able to obtain -- and thus save for future generations -- the volumes of herbarium specimens made by a majority of his contemporaries.

Others who rose to prominence during the 1690s were men who can be roughly divided into two groups: scientists and the supporters of scientists. The distinction is not absolute, as the life of Sir Hans Sloane witnesses. Foremost of the scientists was John Ray. His efforts during the 1680s to produce a two-volume work on the classification of all the plants of the world was, and still is, considered the finest produced of this period. Ray is best known for his flora of England which was the standard that Linnaeus had to overcome a half century later to win the critical support Linnaeus needed in England to carry his ideas of plant classification and nomenclature. Even so, the arrangement of plants proposed by Ray was still preferred by most English workers over Linnaeus' so-called "sexual" system. Today, many consider Ray to be the "Father of systematic botany". Close to Ray was Samuel Doody, Keeper

of the Chelsea Physic Garden, the medicinal garden of the Society of Apothecaries. A neighbor was Samuel Dale who would be an important intermediary between Ray and other English naturalists, and the men and women who collected plants in North America. Dale would amass a large collection of dried plants, and it would be to Dale that the Ray herbarium and library would go when Ray died. Ray was modestly but consistently supported by a number of gentlemen who were interested in botany. Most important was Charles Hatton, an aristocratic promoter, who funded many of Ray's publications.

In the opposing botanical camp were the followers of Leonard Plukenet. Plukenet, like Ray, was a professional botanist, and equally skilled in the art of systematic botany. Unlike Ray who was a man of ill health and abject poverty, Plukenet was at least healthy. His temperament was less conducive to good will, and the Society was badly divided into factions based on the supporters of Ray versus Plukenet. While Ray had a broad base of support, Plukenet's was largely restricted to the even more ill-tempered John Woodward. Woodward, who was even less well thought of by his contemporaries, was not as skilled as a naturalist as Plukenet, and he tended to be ignored by most of the membership of the Royal Society.

Some of the men of note involved in the promotion of botanical science in the Royal Society were James Ayrey, a Quaker merchant; Charles Du Bois, secretary of the East India Company; and Dr. Henry Compton. Compton is a special case. He was a major supporter of the Society's efforts to obtain plants, but as an avid gardener and the Bishop of

London, he was ideally positioned to make certain convenient appointments which benefited both systematic botany and his personal garden. In short, it was no accident that many naturalists that were sent into the field by the Royal Society were ministers for the Church of England.

Bordering both groups were two men. George London was initially the gardener for Henry Compton, but from the late 1690s to the early 1700s, he was gardener to William and Mary, and after her death, to William. As the Royal Gardener, London was ideally suited to ensure a proper place for the exotic plants coming into England from foreign lands. A skilled naturalist in his own right, London did much to foster the international exchange of seeds and bulbs, and to maintain some degree of cooperation between the various factions within the systematic community in London.

A second person is of considerable importance, especially in the history of the discovery of vascular plants in temperate North America. James Petiver was born in about 1663, and established an apothecary shop in London out of which he maintained a world wide correspondence with collectors of natural objects. Interested mainly in insects and shells, Petiver relied mainly upon ship's captains and surgeons, soldiers, naval officers, local physicians, assorted farmers, and even the bored wives of many gentlemen to collect curious plants and animals for him, and send them to London so that he might describe them in his own publications.

Petiver was not only a major promoter of the natural sciences to the amateur, he

often saw to it that their discoveries were rapidly published. Unlike most of his contemporaries, Petiver was willing to provide his correspondents with practical information includings sets of instructions on how to collect and preserve dried specimens, ship seeds and seedlings, and to record useful information to go with the collections. As an author, Petiver was respected. He was not of the stature of Ray, or even Plukenet, for his observations were often with little regards to what had already been published and he had a tendency to redescribe species others had already proposed. His pamphlets and articles are often filled with valuable historical information. As Petiver was receiving so much material from causal collectors, it is only by reading his publications that one can find who was collecting where at any one time in history.

All of these men were members of the Royal Society, but as a whole, the members of the Society were not devote to the subject of botany to the degree satisfactory to those who wished to concentrate on the plant kingdom. The stature of the Society was such that causal discussions were often difficult, and the mere matters of the day-to-day discussions of botanical nomenclature, the latest book on the mosses of England, or the problems of shipping seeds from China were not the type of heady matters one ought to present before the entire membership of the Society. Thus, those gentlemen interested in botany met informally at what must have been one of the first botanical societies in the world. It was known as the Temple Coffee House Botany Club.

Members of the Temple

Coffee House Botany Club met every Friday evening. There are no minutes of the meetings, for it was an informal gathering, but contemporary correspondence indicates that the membership consisted of such men as Sloane, London, Compton, Petiver, Doody, Dale, Ray, Plukenet, Woodward, and when in London, William Sherard and the younger Jacob Bobart of Oxford. From time to time field trips were taken, usually on Sundays, to gardens or places of botanical interest. In the relaxed comforts of the Temple Coffee House, the more detailed aspects of botany could be discussed and it was not unusual for members to bring recently acquired collections of exotic species for demonstration before the membership or to ask for help in establishing the correct scientific name.

It was here, no doubt, that the death of John Banister was discussed, and the need for a replacement reviewed. Compton likely proposed that he, as the Bishop of London and a proponent of the expansion of the Church of England in the New World, could find a position within a parish if the Society could find a naturalist willing to take vows. Funding support was likely discussed as well, and a group of supporters would be established and a treasurer appointed. It would be a duty of the treasure to secure a governmental post so that the colonial government would support the naturalist when he went about his collecting activities. Once the details were worked out, and the plans finalized, then the matter was brought before the membership of the Royal Society for approval. The system worked well.

It was William Byrd I who urged the Royal Society to

send a new collector to Virginia, and called for a search. This was initiated in 1693, but no one was found that was willing or qualified to fill the position. Funding was finally found in the form of a position from the Royal Governor of Maryland, Francis Nicholson, who had previously been Vice-Governor in Virginia. A strong supporter of the expansion of the Church of England, Nicholson's duties in the Catholic dominated colony of Maryland were to transform that colony to the Anglican faith. He moved the capitol from St. Marys to Annapolis, and saw, in the needs of the Royal Society, a means of adding another clergyman.

In late 1694, Edward Lhwyd, Keeper of the Ashmolean Museum at Oxford, wrote to Compton that he had a young man that might be qualified. Lhwyd indicated that he could train the young man in natural history, but it was up to Compton to provide training in the ways of the Church. The young man he spoke of was his deputy keeper, Hugh Jones.

BOTANY IN MARYLAND

Hugh Jones came to Oxford in 1694 on a pauper's scholarship. Born in Wales, he was probably only 24 when Lhwyd reported to Compton that he might be qualified. Over the course of 1695, Lhwyd provided Jones with a basic education in the natural sciences, and in December of that year was able to send him to London armed with glowing letters of introduction and instructions to take his religious vows. Over the course of the month, Jones was schooled on the matters of the Church of England, and in the end was ordained a priest and became a deacon. He was now ready to go to the New World and begin a new life in Maryland.

The Byrd resolution proposed and accepted by the Royal Society was to send a naturalist to Virginia. Funding, however, could not be found in that colony but was obtained from Maryland's governor. When Jones completed his training at the end of December, 1695, he set out for the coast from London to board a ship for the Chesapeake Bay, and the new capitol of Maryland, Annapolis. Rough weather made it impossible for the ship to depart for several weeks, and from time to time, Jones would travel back to London. He could not afford to stay long in the city, but apparently did visit the Temple Coffee House Botany Club where he fell into the Sloane circle of influence. It was James Petiver who took command of the Reverend Jones and began to educate him in the fine art of practical botany. Through him and other members of the Botany Club, Jones received instructions, various supplies, and an occasional piece of equipment. Most importantly were the personal contacts he made. From Petiver, Jones received a request that he should send to him insects and fossils; for Ayrey and Doody he should gather seeds and fruits; and for London and others he should make herbarium specimens. Petiver further urged that Jones should send everything to him for dispersal. He, in turn, would provide Jones with new publications in the field of natural history, help with his medical needs, and provide news about London.

When Jones' ship finally departed in the spring of 1696, Jones was as educated as could be expected. He eventually landed in Maryland, arriving in Calvert County in the heat of August and rode horseback to Annapolis -- a city of less than 40 buildings

and considerable mud -- where he resided with Governor Nicholson for five weeks.

The initial proposal was for Jones to serve as Nicholson's chaplain, but even before Jones left for Maryland, this proposal had been altered to allow Jones to assume duties in one of Maryland's parishes. After five weeks in Annapolis, Jones left for Christ Church Parish in southern Calvert County where he assumed the rectorship of one of Maryland's largest and most wealthy parishes.

During the summer and fall of 1696, Jones collected what he could, and continued to look for objects of interest for his London friends over the winter. In March of 1697, Jones sent letters and two boxes of specimens to Petiver in London. During the growing season of 1697, Jones searched among the meadows and woods near his church, along the edges of the Patuxent River, and the cliffs along the shore of the Chesapeake. He found a wide variety of herbs, shrubs and trees, assorted insects and butterflies, and fossils. Soon he had specimens of birds, small mammals and minerals to go along with the seeds and young plants we was sending to London.

What, no doubt, Jones sent in great expectation, and awaited in the same fashion, was not received with the same level of enthusiasm previously experienced by Petiver and others when a shipment from Banister arrived in the Old World. The seedlings were ill-packed and did not survive the sea voyage. The seeds were poorly labeled, the shells unsorted, the plant specimens small and fragmentary, and the insects broken or damaged. The animals were

poorly preserved and few could be adequately identified or even characterized. For the members of the Temple Coffee House Botany Club, the Reverend Hugh Jones was a profound disappointment.

For Jones, Maryland was not all one could wish for either. The winter of 1696-1697 was especially hard. He writes that snow came in November and remained until March, and at times the snow exceed two feet in depth. The Chesapeake Bay became frozen with ice so thick that sailors could walk to the shore from their ice-bound ships. The cold rains were hard on Jones and members of his parish. Still, for the young minister, his ministry was a challenge.

For Jones, as with most members of the Church of England in Maryland, the long history of Catholic rule represented the past and it was his duty to overcome the errors of religious views previously imposed upon the people. That Maryland had been settled as a Catholic colony was of no immediate importance to the Crown, the Royal Governor, or even the Reverend Hugh Jones. His directions were to conduct all services according to the dictates of the Church of England, no matter the local religious preferences in the community. Similarly, the obvious threat imposed by the growing number of Quakers coming southward from Pennsylvania was a matter of concern, and Jones was a signatory to a document demanding governmental control over the teachings of the Quakers. As a minister in Maryland's most wealthy parishes, Jones was well placed in the social fabric of the Colony. His yearly income was such that he was a wealthy man, that coming from a tax, in tobacco, levied by the sheriff for the minister. The

levy was based on the number of people in the parish, with each adult white man or women equal to one share per person while any black slave, no matter the age or sex, was equal to two-thirds of a share. Good year or bad, the minister received his levy.

For Petiver the failings of Hugh Jones in Maryland to carry out his mandate to collect was particularly troublesome. As his strongest supporter in London, the plight of trying to collect, and survive in the New World, were understood by Petiver. Petiver stood to lose his own investment of time and energy if Jones failed, but it was clear even to the apothecary that the hopes for a significant improvement in Jones' abilities were ill-founded. Petiver himself expressed his disappointment when he reviewed his broken insects, yet he attempted to describe what he could. The bulk of Jones' Maryland plants went directly to James Ayrey and George London, and while Petiver received a few, these were not a significant part of his botanical holdings. However, in late 1697, George London gave to Petiver two large volumes of dried plants gathered in the New World, including a significant set of Jones' plants. Armed with these two volumes filled with Maryland plants, Petiver set at once to characterize them and to prepare an article for publication in the *Philosophical Transactions*.

To further this effort, Petiver wrote to Jones urging him to send all collections that he could immediately. In addition he told Jones of the disappointment his collection had caused in London and informed him of a move to send others to the Colony. If Jones was to receive credit

for his work in Maryland, Petiver warned, he had to send his plant and animal collections before the end of 1698, for in that year, others would be collecting in Maryland.

At the November, 1697, meeting of the Royal Society, William Byrd II moved that the Society should find "a Fitt person" to be sent to "Virginia in order to make observations and Descriptions of all the Naturall productions of those parts and to write the History thereof." Although Byrd urged that the naturalist be sent to Virginia, the remaining part of his motion stated that for "such a fitt person the charge of his passage and 25 pounds per Ann. would be allowed him by the Governor of Maryland." Once again, Francis Nicholson offered to fund the collector, and the naturalist was to be in Maryland, not Virginia.

Nearly all of the necessary arrangements were completed at the Temple Coffee House Botany Club before the vote and William Vernon, a fellow of Peterhouse at Cambridge University, was determined to be that "fitt" person called for in Byrd's resolution. He was approved at the December meeting of the Royal Society, and set out for Maryland in January, 1698.

Vernon arrived in the Maryland in April and he began to collect almost immediately. Vernon's proposal was to remain in Maryland for three years, and to concentrate upon the bryophytes, lichens and similar non-vascular plants. He had received permission from the University to be gone from Cambridge with the proviso that he study botany, not marry, and report each year that he was alive!

The warnings sent to

Jones were headed, and a large number of plant collections arrived in London in early 1698. Immediately Petiver set to work upon them, in concert with the Geogre London collections already in hand, but by this time Petiver was somewhat less concerned about his interests in Maryland for he had played a trump card in the form of Dr. David Krieg.

David Krieg was a Prussian friend of James Petiver's who had been living with him for much of 1697. Krieg had been illustrating many of Petiver's scientific papers during the year he was staying in London, and as a physician and skilled naturalists, Krieg was an ideal person to venture into the field. Petiver had been a party to Byrd's proposal to send Vernon to Maryland, but the opportunity to send another collector, especially one devoted to him, could not be passed by. During the conversations relative to Jones, Petiver must have convinced Krieg that he should go to Maryland as well. Krieg could not obtain support from the Royal Society, or even Francis Nicholson, so it was necessary for him to find a position as a ship's surgeon. This accomplished, Krieg departed in March of 1698, nearly two months after Vernon, and arrived in April just before Vernon.

Krieg's close and personal friendship with Petiver is well known, and their letters of affection continued well after their year together at Petiver's home in 1697. Perhaps as a part of that relationship, Petiver gave to Krieg a young man named Issac who was to assist Krieg with his explorations. Upon his departure for the New World, Petiver presented Issac with a rather famous set of instructions:

When ever you goe ashore take with you a Quire of Brown Paper or Collection Book. An Insect Box, Pins & a small Viall halfe fil'd with Spirit in which you drown all your supernummary Flies, Beetles, Catterpillars, & other Insects especially such you find in water. Also a Booke for Butterflies & Moths of each wch get al you can find, with a paper bag or two to put all ripe seed, ffruit & berries as also all ye shells you meet with both land & water & as many of each sort as you can find; such as are thin & brittle you must put into a Pocket by themselves with moss or any soft leaves to keep them from breaking.

These instructions were exact and perhaps a bit overbearing, especially if Issac had actually carried them out fully to the letter. As fate would have it, Issac was never allowed to leave the ship, and thus was of no value to Krieg as an assistant.

Petiver was not the only one trying to get a personal collector into Maryland. John Woodward -- the vowed enemy of Sloane and Petiver -- and his botanical associate, Plukenet, also wanted material from Maryland. At first, apparently, Woodward and Plukenet did not receive Jones material, and were not slated to receive Vernon collections either. Fearful of this, John Woodward apparently wrote to the Royal Governor, Francis Nicholson, and complain of Sloane and others in London. He implied that there were collectors in Maryland who were taking objects of nature without his permission, and that such person -- Jones, Krieg and Vernon -- were associated with such

"Rogues and Rascalls" as Sloane, Ray and Petiver. This correspondence must not have greatly impressed Nicholson for he knew of Woodward from others. Still, Petiver was concerned and in his letters urged Jones to send Woodward specimens which, apparently, Jones did. Vernon wrote Sloane from Maryland that although Woodward had claimed over 100 correspondents in America, he had met none and suspected Woodward's honesty. Vernon ended his commentary on Woodward by calling him "an abominable Villainous & Silly fellow".

The Reverend Hugh Jones knew that Krieg and Vernon were coming, and both men carried letters of introduction from Petiver. It is likely that all three men met each other in Maryland. It is certain that Krieg and Vernon collected jointly, and likely traveled together on a few occasions.

The collecting activities of Krieg and Vernon were limited to the coastal plain of Maryland, and an examination of their extant collections clearly shows that Krieg was able to collect plants more early in the year than Vernon. This was of little initial concern to Vernon as he was planning to stay in the Colony for three years. In July of 1698, Vernon wrote to Sloane that he was having to return to London. This was most likely because he had learned that Francis Nicholson had been appointed Royal Governor to Virginia, and would shortly leave Maryland. Without Governor Nicholson to support his position, Vernon would have to depart. Krieg, who planned to spend only the growing season in Maryland, collected more rapidly, gathering plants, insects, birds and mammals, fossils, shells and assorted

other items of natural curiosity. In October of 1698, Krieg and Vernon departed the Royal Colony of Maryland and arrived together in England less than two months later.

Almost immediately the collections of Krieg and Vernon were divided into sets and sent out to the supporters of Vernon, with duplicates of the Krieg collections going to many of the same people as well. Sloane received a large set of these collections, and these, in turn, were sent to John Ray for naming. Ray was in the process of completing a supplement to his *Historia plantarum*, and the new Maryland collections would prove a valuable addition to the world's flora. Krieg specimens went to Plukenet, probably through Petiver, and Petiver provided Sloane with additional material which was not sent to Ray. Duplicates were accepted by Ayrey from both Krieg and Vernon, and Sloane received a set of Vernon specimens directly from the collector. Some material was sent to William Sherard at Oxford. Seeds and fruits were distributed among the various growers, and soon Maryland plants were flourishing in English gardens.

BOOKS AND ARTICLES

The first of the major papers dealing with the natural history of Maryland was published by James Petiver. It appeared as an article in the last 1698 issue of *Philosophical Transactions* and was a catalogue of the plants and animals found in Maryland by Hugh Jones. In all 54 vascular plants were reported by Petiver. The majority were species previously known to naturalists and had been found in Virginia by Banister and other naturalists. A few were considered to be new species

by Petiver, and described as such. None of the species was illustrated.

A small collection of plants had been gathered in Maryland prior to the arrival of Hugh Jones in 1696. A few species from the Colony were described by Plukenet in 1696, and one was illustrated as early as 1691 in *Phytographia*, his book of illustrations. It is unclear who might have gathered these plants and when. A possible candidate is a ship's surgeon and later correspondent of James Petiver, Dr. John Smart. He gathered plants in Maryland in 1708. He is best known for his plants collection from the Hudson Bay region of Canada which he obtained in 1708. These specimens are found in the Petiver and Plukenet volumes of dried plants in the Sloane Herbarium.

In 1700 Plukenet published a second volume devoted to botany. His 1696 book, *Almagestum botanicum*, had been well received but was criticized as incomplete as a world flora. This was indeed true, and a supplement, *Almagesti botanici mantissa* was released in 1700. The *Mantissa* contained the description of over 200 species of Maryland plants, and several were illustrated in the *Phytographia* section included with the *Mantissa*. Most of the Maryland plants reported by Plukenet were those gathered by Jones and Krieg. A new book, *Amaltheum botanicum*, was published in 1705 by Plukenet. In that year only 16 Maryland species were described, but numerous plants previously described from the Colony were illustrated in 1705.

John Ray published a supplement to his two-volume *Historie plantarum* in 1704. Called the *Supplementum*, Ray ac-

counted for over 400 polynomials applied to Maryland plants. In addition to new species proposed by Ray, he listed, sometimes in synonymy, sometimes with comments, all previously published names which had been applied to Maryland plants by Petiver and Plukenet. William Sherard, and perhaps Jacob Bobart, described a small number of Maryland plants which Ray published in his *Supplementum*. Ray also published an index to James Petiver's herbarium in the *Supplementum*, and this contained descriptions of a few new species from Maryland.

From 1699 to 1702, Petiver added other new species of Maryland plants to the literature. These appeared in a series of pamphlets published by him, and many of the species were illustrated.

In addition to the Maryland plants reported in the published works of Plukenet, Petiver and Ray, these authors published new species from other regions of temperate North America as well. The majority came from Virginia, but a growing number of new collections were coming to Europe from the Carolinas and from the New England area. Unlike Banister and Vernon, who were professional naturalists in the sense that their positions were supported by the Royal Society, collections from other areas were being gathered by amateurs. Most of these people were ship's captains or surgeon, local residents, or the occasional visitor. None was destined to become a major supplier of plants to European gardens, however, and their impact upon the history of systematic botany is exceedingly limited.

Botanical explorations essentially ended in Maryland with the departure of Krieg

and Vernon in October of 1698. Jones remained in Maryland and continued to serve his parish. He gathered specimens in 1699, but by 1700 the effects of tuberculosis were beginning to sap his strength. His letters became less frequent and were more often filled with indications of his declining health. Finally, in January of 1702, Hugh Jones, minister and naturalist died. He was probably 31 years of age.

The failure of Jones, Krieg and Vernon in Maryland was a serious blow to the men of the Royal Society, and especially the members of the Temple Coffee House Botany Club. To be sure others were collecting along the eastern seaboard of North America, and James Petiver continued to receive specimens from a large number of persons from New England to Georgia. Several people were in Virginia and the Carolinas collecting specimens which Petiver would describe. Yet, death was taking its toll even of the membership of the Botany Club. Ray died in 1705 and Plukenet followed in 1706. Petiver himself would pass away in 1718, but by this time, Vernon and Krieg had both died.

Botany itself was changing. The desire to have exotic plants had not lessened in any fashion, but new and more exciting species were coming from the subtropical and tropical regions of the world. The growing diversity of flowering trees and shrubs from China and Japan entering Europe was proving to be far more exciting than similar species from temperate North America. Likewise, the succulent species being found in southern Africa were suddenly attracting a large number of enthusiasts, to say nothing of the bulbous species native to northern Africa and parts of

the Middle East. Horticultural interests in temperate North America were waning.

The nomenclatural confusion was rapidly getting out of hand, and the lack of systematic order and a useful classification scheme -- in spite of Ray and Tournefort -- was causing great difficulties in attempting to classify the hoards of species coming to Europe from foreign lands. Publication costs were rapidly escalating so rapidly that publishing became difficult. The idea of the "genus" had been established by Tournefort, who died in 1708, and Ray had proposed groups of genera which we would today call families, but it would remain for the Jussieu family of Paris to complete these ideas, and that would be after 1753. Botanical exploration continued in temperate North America, and many unique species became known in Europe. A twenty year period of neglect would exist from 1700 until 1720 although a review of extant herbaria collections in Europe reveals a period of considerable activity. Without these discoveries being published, however, their existence was not known and it would remain for others to complete the task of describing the native flora of temperate eastern North America.

THE CATESBY YEARS

Mark Catesby is perhaps the best known of the American naturalists. Born and educated at Essex, Catesby found that he had an early interest in the natural sciences due to his close friendship with Samuel Dale, the long-time friend of John Ray. Dale, the Brantree apothecary, was the author of the widely used *Pharmacologia* and had acquired a fine herbarium over years of plant collecting. He received

many specimens through his association with the Temple Coffee House Botany Club. With Dale's encouragement, but limited support, Catesby went to Virginia in 1712 to pursue a career as a naturalist. He went to live with his sister, Elizabeth, who had married Dr. William Cocke, an Englishman who had migrated to Virginia in 1710. A friend of the Royal Governor and the Byrd family, these associations proved to be exceedingly useful to Catesby, and he took full advantage of them. Within a week of his arriving in Virginia, Catesby met William Byrd II. Catesby spent a part of the summer and fall of 1712 at Westover, the Byrd estate, and gathered plants in the area where John Banister had roamed 20 years before.

Encouraged by his friendship with Byrd, Catesby began to collect everything he could find. Within a year Governor Spotswood sent to Henry Compton a large consignment of seeds collected by Catesby along with a number of herbarium specimens. The specimens went to Dale, and he informed the members of the Temple Coffee House Botany Club of the many interesting and finely collected plants he was receiving from Catesby. By 1715 James Petiver was writing to Catesby and asking the young naturalist to send him specimens.

When Catesby returned to England in 1719, he brought with him a large collection of vascular plants which he gave to Dale. Dale shared the Catesby material with William Sherard at Oxford who, from 1703 to 1717, had been consul at Smyrna, a city-state in Turkey. Sherard had been working on a revision of Bauhin's *Pinax* and had much of it completed prior to 1703. He had urged Tournefort to complete

the task when he assumed his diplomatic post, but as Tournefort died in 1708, the revision remained undone. With the arrival of Catesby collections from Virginia, coupled with the large number of species described since 1703, Sherard once again turned his attention to the *Pinax* revision.

An aspect that certainly aided Sherard in this matter was the annotations Sherard found on the Catesby specimens. Dale had attempted to keep up with the synonymy of his day, and many of Catesby's specimens he had been able not only to identify but assign synonymies as well. Nonetheless, fully half of what Mark Catesby brought with him was new.

Catesby was certainly in the mold of Banister. He made careful notes and field sketches -- which may still be examined today on his specimens -- and knew what had been gathered in Virginia previously as well. Catesby knew that the coastal plain had been well collected, not only by Banister and others who had been in Virginia, but Jones, Krieg and Vernon in Maryland. He proceeded to work further inland, and even went into the mountains.

Upon his return to England in 1719, Catesby was well known, but only to Dale, Petiver and a few other members of the Royal Society. Through a series of well placed letters with rather blunt hints, and a careful distribution of herbarium specimens, Dale managed to impress critical members of the Society with the value of Mark Catesby as a collector. Within a few months, the Society was discussing the idea of sending Catesby back to the New World. As before it was necessary to find a position,

and to arrange for a group of supporters.

The Society had worked closely with Francis Nicholson in the past, and once again the members turned to him for help. Nicholson was now the Royal Governor to South Carolina, having been appointed to that post in 1720. In October Nicholson informed the Society that he would permit Catesby to come to the Colony and would provide him with an annual sum of 20 pounds per year.

The history of botanical explorations in the Carolinas prior to the time Mark Catesby arrived was one marked with the occasional visitor and residents interested in natural philosophies. Even so South Carolina contributed little compared to Virginia prior to 1720, and North Carolina was even less significant during that period of time. Various people gathered plants in the Carolinas with the help of James Petiver. Robert Stevens, who lived near Charles Town, sent plants and animals to Petiver starting in 1698. From the same area Edmund Bohun and Robert Ellis sent more plants to Petiver, and these were described by Petiver, and Plukenet, prior to 1705. A British sea captain, William Halsted, also gathered plants from 1699 to 1703. The collections of Bohun and Ellis led to many significant additions to Petiver's volumes of dried plants.

One of the first women to actively collect in temperate North America was Hannah Williams of South Carolina. She sent a large collection of butterflies to Petiver in 1701 followed by a few plant specimens by 1705. These collections would have been more significant had they been published, but only a few ever

saw the printed page, and most were lost to the botanical community when Petiver died in 1718.

One of the finest collections of Carolina plants ever received from the Carolinas prior to 1720 was made by the Reverend Joseph Lord. American by birth and educated at Harvard University, Lord was well known to the small circle of New England scientists active in that area before he went to South Carolina in 1695. He settled in Dorchester on the banks of the Ashley River, and under the guidance of Hannah Williams, began to collect plants in 1701. Lord's large and well preserved specimens are readily noted in Petiver's extant volumes of plant specimens because of their elegantly hand written labels.

Lord wrote yearly to Petiver and sent him specimens with nearly every letter until 1711. Many of Lord's collections were described by Petiver in his *Gazophylacii naturae & artis*, a series of pamphlets that were published from 1702 to 1709. In 1712, Petiver described a few of Lord's fern species in his *Pterigraphia americana*.

Another of James Petiver's Carolina correspondents was John Lawson. An apprentice in the London Society of Apothecaries before he went to North Carolina in 1701, Lawson was knowledgeable in the art of collecting plants and securing information on the medicinal significance of exotic plant species. Although there was some initial correspondence between Lawson and Petiver in 1701, there was no major exchange until 1709 when Lawson published his own account of the natural history of North Carolina. This book was mainly an overview of the natural

history, topography and geology of the Colony, and although he traveled widely he seems to have made only a few collections prior to 1709. Lawson met Petiver when he was in London shortly before his book was published. He was the Surveyor General of the Colony, in a position to explore, and both Petiver and George London encouraged him to send them specimens and seeds. A gift of several books and assorted items necessary to gather animals, insects and plants helped to solidify their relationship. During Lawson's surveying of the Virginia and North Carolina boundary, he was able to gather many specimens and to enrich Petiver's holdings of plants, insects, snakes, birds and fossils. In 1711 Lawson was hoping to collect extensively and wrote Petiver of his plans. Unfortunately he was captured by Tuscarora Indians who were displeased with his attitude toward them and killed him. His last book of plants had been sent to Petiver but two months prior to his death in September of 1711.

John Lawson's *A new voyage to Carolina* proved to be a successful publication and greatly strengthened his place in history. Unfortunately this travel account does not contain information on the plants of the Colony in a form useful to subsequent generations of taxonomists and he was destined to play no role in the future of systematic botany.

When Catesby came to the New World in May of 1722, he was already well known for his knowledge of plants and animals. The community of Charles Town, South Carolina, was one place where naturalists were considered an asset.

Catesby left London well sponsored with the financial support of not only the Royal Governor but that of four noble peers of the realm and a number of English gentlemen naturalists, notably Sloane, Dale, William Sherard and Mr. Charles Du Bois, the secretary to the East India Company. His efforts were sanctioned by the Royal Society and carried out with the unofficial but nonetheless important approval of the Temple Coffee House Botany Club. As he had done in Virginia, Catesby quickly established himself in the best of social circles in Charles Town, and became an influential member of the Colony.

Catesby traveled widely in the Carolinas, visiting both North and South Carolina, portions of Georgia, and even northern Florida. He went westward as far as the Piedmont. In the winters he often went to Bermuda and Bahama collecting and illustrating the plants he encountered. He gathered many different kinds of seeds and fruits which he sent to England, and these were rapidly incorporated into the gardens of western Europe. He gathered all objects of nature he could find -- animals of all kinds, fossils, plants of nearly every type -- and managed to make notes on geology, anthropology and ecology. Pleased with his efforts in the Carolinas, he attempted to encourage his London supporters to finance an expedition to Mexico, but this proved impossible. When the term of Francis Nicholson ended in 1725, Catesby traveled to Bermuda where he spent nearly a year, and then, in 1726, continued on to England.

Upon his return to London, Catesby immediately set to the task of publishing his New World discoveries. He

proposed to his supporters that he begin to prepare a volume on the natural history of the areas he had visited. Unfortunately for Catesby, his supporters in London were no longer willing to provide him with the means to pursue his goal, now that he was not providing them with specimens, and he was forced to find other means. Faced with this problem, Catesby learned to etch his own copper plates for the proposed colored illustrations which he then had to paint himself. He found work in various nurseries where he was able to observe many of his own species growing in cultivation and was able to adjust his illustrations and descriptions accordingly. With a no-interest loan from Peter Collinson, Catesby was able to proceed and finally release, in parts, his *Natural history of Carolina, Florida, and the Bahama Islands*.

Initially, William Sherard at Oxford assisted Catesby in the preparation of his text, and especially with the complex nomenclature. Given that many of Catesby's American plants had previously been described based on Virginia, Maryland and New England collections, Sherard's knowledge of these plants was valuable.

Catesby's close relationship with Sherard caused him some minor difficulties in his friendship with Sir Hans Sloane. While Catesby had been in the New World collecting for his English patrons, they had been warring among themselves over his material. This battling was most fiercely waged between Sloane and Sherard. To a large degree this was only a manifestation of their longer and more serious disagreement over the access Sherard requested of the many collections of plants Sloane had acquired. In parti-

cular, Sherard wanted access to the collections formerly owned by James Petiver. Sherard's work on his revision of Bauhin's *Pinax* had been delayed by his inability to thoroughly study Petiver's many collections. By the early 1720s, this became a major source of difference between the two men.

In 1721, Sherard asked a German botanist, John Jacob Dillenius, to come to England and assist him in completing the *Pinax* project. Sherard lived in London at the time, and had asked Sloane on numerous occasions to be allowed to review the Petiver collections so he could complete his revision. Sloane initially refused saying that the Petiver material was too disorganized and as soon as he had it in order Sherard could see it. When Sherard finally did get an opportunity to examine Petiver's collections, he complained that Sloane had so ill treated them that they were essentially useless. Their dispute over access to the Petiver collections continued for years, and when Sherard died in 1728, the feelings of ill-will were passed -- in a less intensive form -- to Dillenius.

Dillenius did what he could with the Petiver polynomials, and other scientific names proposed by Plukenet (Sloane had his collections as well) and others. By using the herbarium at Oxford, and the expertise of Dillenius, Catesby was able to associate his material with species previously described by Ray, Plukenet, Petiver and others. This was aided by Samuel Dale's own annotations of Catesby specimens that had come to England while Catesby was still exploring. As a result, Dale, who had Ray's personal herbarium, had been able to

accurately name many of Catesby's specimens based on his own knowledge of the Virginia and Maryland flora for he had duplicates of many of those species in his own herbarium.

By the spring of 1729 Catesby had completed the first portion of his book and began to release it as sets of numbered plates with the idea that the book be assembled later when it was completed. He presented each set of plates to the Royal Society, and by November of 1732 had given the Society all the parts that constituted the first volume. It was Collinson who finally presented Catesby to the Society for membership which was granted in May of 1733.

Parts for the second volume began to appear in January of 1735, and Catesby continued to give each part to the Royal Society until all parts were completed in December of 1743. In 1747 he published an appendix and Collinson was able to write to Linnaeus that Catesby's book was completed. By this time the number of contributors to Catesby's project had grown to 166, well above the original 12 men who had provided him with his initial funding. Included among his large list of patrons were a number of royal families, ambassadors, botanical friends and colleagues. Perhaps most significant was the number of supporters from the American colonies. The final book contained 200 colored plates of which 171 plants were figured.

Catesby's three-year effort in South Carolina has come to be regarded as one of the most significant in American natural history explorations. He has come to be regarded as one of the more skilled observer. Catesby was

only an adequate illustrator, but the combination of his art work and his ability to observe plants and animals has been appreciated by many since 1747, including Linnaeus.

THE LINNAEAN ERA

For temperate North American botany, the Linnaean era began when Carl Linnaeus came to England. He came to examine the collections of dried plants that had been gathered in the New World by the host of collectors starting with John Banister and essentially ending with Mark Catesby. For Linnaeus, Catesby's work was highly significant. The full text of volume one and much of the second had been printed when Linnaeus visited Dillenius in August of 1736. At Oxford, Linnaeus could not only examine the plates, but the actual specimens as well for Sherard and Dillenius had received nearly a full set of Catesby's specimens. In addition, Linnaeus could examine collections made by earlier naturalists, now annotated by Sherard and Dillenius with the polynomials proposed by various workers up to the mid-1730s. Previously in Sweden, Holland and France Linnaeus had been able to see garden material, and had been able to characterize many of the New World species on the basis of these plants. He continued to examine garden material, including the botanical garden at Oxford, but it was his examination of herbarium material that proved critical to his understanding of the application of polynomials.

Linnaeus' visit to England made it possible for him not only to see many collections which he had been unable to study previously, but also gave him an opportunity to talk with many of the men who had been supporting

explorations throughout the world. He visit Sir Hans Sloane briefly but did not examine his herbarium. He formed a bond with Peter Collinson and James Ellis which was to carry him through the difficult period of acceptance of the Linnaean methodology in England after 1753.

While Linnaeus certainly concentrated upon the collections made by Catesby and others who collected in the southern portion of the eastern seaboard, he did see a few collections made by collectors from the New England area and eastern Canada. Botanical explorations had been occurring in the north while similar activities were being carried out in the south. John Josselyn was one of the first naturalist to visit this area, traveling to the present state of Maine in 1638 and 1639. On this trip he had little time to observe plants and animals, but on a much longer trip, lasting from 1663 to 1671, Josselyn had ample opportunity to make observations. He was primarily interested in medicinal plants of the area, and discovered that the herbals of his day were inadequate in dealing with the New England vegetation. He made no permanent collections and apparently failed to gather seeds of the plants he saw. Nonetheless, Josselyn prepared a small book with rather crude and poorly executed illustrations of the New England flora. Entitled New-England's rarities discovered, his book was published in 1672; it proved to be of little interest to Linnaeus and it is not mentioned in *Species plantarum*.

Other collectors came to the New England area, but few were of major importance. Thomas More, the so-called "Pilgrim Botanist", came to New England in 1722 and stayed

until 1724. When five Mohawk chiefs were sent to England in 1709, More apparently met them and received an invitation to visit them in the New World. He had worked with Bobart at Oxford in the 1690s, and had collected for Lhwyd in southwestern England in the 1700s. He was an enthusiastic collector, and Petiver, Sloane and others encouraged him to go to America. It was Sherard who secured the funds for More to travel, but had some difficulties in finding supporters for a man in his 40s.

More proved not to be as successful a collector as William Sherard and his supporters had hoped. Nonetheless More's many collections were in the Sherardian Herbarium at Oxford University when Linnaeus visited it in 1736. So too were the Hudsons Bay collections of Richard Tilden who had visited the area in about 1700. These collections were likely the only plants from northern Canada that Linnaeus examined in the herbarium.

No doubt Linnaeus and Dillenius, who initially began their association with a profound distrust of the other, discussed Dillenius book *Hortus elthamensis* which had been published in 1732. Dillenius had discussed nearly 400 species grown in the garden of James Sherard, the brother of William Sherard. Dillenius had served Sherard up to his death in 1728 with a high degree of devotion, and hoped to complete the revision of the *Pinax* which Sherard had so long struggled to see done. Shortly after William's death, James asked Dillenius to prepare a book on his garden. Dillenius, the first Sherardian Professor at Oxford was reluctant to do it, but bowed to the will of the wealthy James and devoted several years to the book. The *Hortus*

was well illustrated and well written with abundant information on the distribution and taxonomy of each species mentioned. It was a major work and Linnaeus recognized it as such almost immediately. At Oxford, Linnaeus was able to review both the garden and herbarium specimens Dillenius had used in arriving at his taxonomic disposition of the species he treated. Included in the *Hortus* were a number of Banister and Catesby species as well as a few grown from seed gathered in Maryland. The synonymy was rather complete, and Linnaeus could examine the herbarium specimens annotated by Sherard, Dale, Dillenius, and even Ray, Plukenet and Petiver, and trace the evolution of the species definitions Dillenius had arrived at. Linnaeus remained at Oxford for some eight days. It was here he studied the extant collections of American plants which aided him when he assisted Johann Friedrich Gronovius during the winter of 1737-1738 in classifying a large collection of plants from Virginia gathered by John Clayton.

CLAYTON AND KALM

Colonial Virginia of John Clayton's era was different from that Mark Catesby had found in 1712. The population was growing and the urban centers, once restricted to the Williamsburg area, had expanded far beyond the James River. There was a college, William and Mary, newspapers in the Colony -- something that was not even yet in the city of Oxford in England. The intellectual center that had once been Williamsburg was now divided between Boston, Philadelphia and Charles Town. Virginia still held great families, and most were deeply interested in botany and the other natural philosophies.

Some maintained large gardens and were exchanging plants not only with European centers, but even with other colonists elsewhere in the New World.

Clayton came to Virginia in 1720, joining his father who was in the government and would eventually rise to be the Attorney General. Clayton acquired land and became an established, although modest, man of means. He too became a government official serving as the Clerk of Gloucester County where he lived. Like other Virginians, Clayton established a garden and entered into a correspondence with William Byrd II, Mark Catesby who he had met, Peter Collinson, and John Bartram. It was Catesby that sent Clayton's herbarium specimens to Gronovius, and others, and urged Gronovius to carefully review them with the hopes of classifying them.

In the 1730s Clayton prepared a manuscript entitled "A catalogue of plants, fruits, and trees native to Virginian" and sent it to Gronovius. Taking the manuscript, and the many Clayton specimens which had been gathered since the early 1730s, Gronovius and Linnaeus began to prepare a manuscript on the collection following Linnaeus' new system of classification rather than that of Ray's which Clayton had followed. Linnaeus worked closely with Gronovius on the nomenclature of the Virginia species he was publishing. The knowledge Linnaeus had gained from his visit to Oxford where he examined so many of the temperate North American plants proved to be useful to him in naming the plants gathered by John Clayton and assigning synonymies to them. The resulting book, *Flora virginica*, appeared in two parts. The first part was published in 1739, while the second was released in 1743. Linnaeus

was closely involved with the 1739 volume, but had little direct influence on the 1743 volume.

When Clayton saw Gronovius' *Flora virginica*, he was profoundly disappointed. Not only had Gronovius not followed his manuscript, he failed to acknowledge Clayton's contribution to the Flora except for a minor comment in the introduction. To remove this as a possibility from happening again, Clayton began to study the Linnaean methodology with the hopes of writing his own flora of Virginia. Within a few years he was able to write his fellow naturalists commenting on various technical points in their descriptions, and he turned his attention to writing. In 1748, Clayton traveled into the high mountains collecting many new species which were as yet unknown to Linnaeus. In 1757, Clayton sent to Peter Collinson his revision of *Flora virginica*, but could not find a publisher. Collinson asked George Ehret to prepare plates for the volume, and some were actually prepared before Laurenz Gronovius, the son of Johann, published his father's long delayed second edition in 1762. The book forced Clayton and Collinson to abandon their project, and Clayton's revision was never published.

Clayton had proposed to use Linnaeus' binomial system of nomenclature, and this plus the Ehret plate would have made his flora a major publication. The younger Gronovius did not illustrate his work, nor did he use binomial nomenclature, and thus this post-1753 flora is of no systematic importance and is little used today.

A causal friend of John Clayton's was John Mitchell, a man of many talents and broad

scientific interests. He was in Virginia from 1735 to 1746, returning to England because of his ill health. He also maintained a large and active correspondence with many contemporary scientists including botanists such as Dillenius, Gronovius and Linnaeus. He knew John Bartram as well and communicated with Cadwallader Colden in New York, Peter Collinson in London, and even two of his fellow American collectors, Mark Catesby and Peter Kalm.

Mitchell's interests in botany were somewhat limited compared to his contributions made in other areas of the natural and physical sciences. Nonetheless he sent numerous herbarium specimens to Dillenius and Collinson, along with various manuscripts. One of those papers was published for him by Collinson in 1748; it was titled "Nova genera plantarum Virginianum." This work was consulted by Linnaeus and various of Mitchell's new genera were mentioned or treated in the first edition of *Species plantarum*.

Of perhaps greater interest were Mitchell's comments regarding species and speciation. He proposed that plants and animals that can produce offsprings biologically ought to be considered members of the same species, whereas those that cannot produce offsprings or the off-spring are sterile, ought not to be regarded as the same species. Mitchell felt Linnaeus' artificial system was unreliable, and that Ray's system was much more natural as it was based on attributes of the whole plant rather than just the reproductive parts.

Even though Mitchell sent the bulk of his plant collection to England in 1738 and in 1742, he continued to botanize

in Virginia. When he departed in 1746, he took more than a thousand specimens. Unfortunately, his ship was stopped by a Spanish vessel carrying pirates and the contents plundered. Although Mitchell was eventually able to recover the majority of his collection, most of it was no longer useful and was discarded.

Both Mitchell and Clayton correspondent with Cadwallader Colden of New York. Colden had initially come to America in 1715. Born in Ireland of Scottish parents and educated at the University of Edinburgh, he studied medicine in London before going to Philadelphia where he practiced medicine among other enterprises. Colden became a correspondent of James Petiver but apparently never sent him any plant collections. He returned to Scotland in 1715, married, and returned to Philadelphia where he continued to practice. However, in 1720, Colden was appointed Surveyor General for New York, and he moved to that Colony where he entered into a life of politics.

As a result of his position, Colden was able to become wealthy through land speculation, and was slowly able to amass an excellent scientific library. His correspondents were the "who's who" of American and European science, with Collinson, Gronovius and Linnaeus among his European associates, and the Bartrams, Clayton, Mitchell, and a host of others who would be important after 1753 among his American friends.

In 1739, Colden and his family left New York City and moved to an estate he named Coldengham. Here he was able to write on a wide variety of subjects, including botany. Colden began to study the

Linnaean method in the early 1740s, and with a visit from John Bartram in 1742, Colden began to seriously study the local flora. He collected plants around Coldengham and sent them to Collinson, and even Linnaeus. Soon he was attempting to prepare a flora of New York, but mostly it was a treatment of plants in his local area. Published from 1743 to 1750, in parts, Colden's "Plantae Coldenhamiae in provincia Novaboracensi Americane sponte Crescentes" was used by Linnaeus to characterize a few species in 1753.

Colden, like Mitchell, found fault in Linnaeus' sexual system, and voiced his disagreements about it to Gronovius. Within a few years, Colden's interest in botany had lessened, but he was pleased to discover that his curiosity in botany had passed onto his daughter, Jane.

Jane Colden began her studies of botany about the time *Species plantarum* appeared in print, and by 1755 her father wrote to Gronovius of her pronounced skills. What correspondence he was receiving on botany, Cadwallader passed on to Jane. She exchanged seeds and specimens with several American and European naturalists, and entered into her own correspondence with a number of new naturalists, such as Alexander Garden, of Charles Town, South Carolina, who, like herself, would be a significant contributor to Linnaeus' subsequent editions of *Species plantarum*. She prepared a "Flora of New York" with some 340 illustrations, but the work was never published during her lifetime. It now appears that this failure was more one of her sex than her ability.

Both of the Coldens knew John Bartram. Of all the

Linnaean era collectors in temperate North America, John, and his son William, collected more widely than any other naturalist. Born in Pennsylvania of Quaker parents in 1699, he moved at an early age to North Carolina where he remained until a young man. Upon the death of an uncle, Bartram inherited a small farm near Darby, Pennsylvania, where he moved. After the death of his first wife in 1827, John and his only surviving son moved to a new farm on the Schuylkill River, a short distance from Philadelphia, and established a small but significant botanical garden on about five acres.

Bartram prospered in his farming, married again, and he was able to expand his land holdings so that he could eventually devote much of his personal time to botany and horticulture. Bartram soon began to explore the field of botany, mainly from the aspect of medicinal plants, learned to read Latin, and to read Linnaeus' writings as they became available in America. He also learned to read and write English, and while neither his English or Latin were perfect, he managed, and became an active participant in the scientific circles that dominated the lives of a handful of men in the Philadelphia area.

Like so many others, Bartram began to correspond with Collinson in the 1730s, and to exchange specimens. Some of his collections of dried plants went to Dillenius at the University of Oxford, and these Linnaeus likely saw in August of 1736. Collinson became an enthusiastic supporter of Bartram and encourage all who went to America to meet him. He also encourage John Bartram to travel and collect plants which would be of potential value to the horticul-

tural gardens of Europe. By 1738 Bartram was proposing to Collinson to make a major botanical expedition into Virginia, and to this Collinson added even more encouragement in the form of letters of introduction, instructions and advice of the art of collection live specimens, seeds and herbarium specimens. Soon Bartram seeds were sprouting in the Oxford Botanical Garden as well as at the Chelsea Physic Garden. Within a few years Collinson had established a network of supporters for Bartram, and as the years past, Bartram made more and more exciting discoveries of unique species heretofore unknown in the scientific world.

Many of Bartram seeds found their way to Linnaeus' garden at Uppsala, and through them, Linnaeus was able to describe new species of American plants. Bartram was now traveling widely in the eastern part of temperate North America, visiting not only the more remote regions along the coastal plain but the high mountains to the west. He made repeated visits into the colonies of New Jersey, Delaware and Maryland, as well as numerous trips to various parts of Pennsylvania. He traveled into New York, met Colden, and collected in the Catskills. He even went into southern Canada.

The Bartrams continued to collect well past 1753, and John and his son William soon became well known for their fine plants and exotic travels to the more remote regions of the eastern seaboard. The two men rose to fame, with John being appointed the Royal Botanist in 1765. Their 1765 expedition to Florida has become famous due to John's book published the following year.

A visitor to the Bartram

farm in the summer and fall of 1748 was Peter Kalm. A student of Linnaeus', Kalm came to America in September of 1748 with the intention of collecting dried herbarium specimens and seeds for his major professor. During his first fall he gathered seeds and plants in Pennsylvania and New Jersey, while during the summer he turned northward to New York and southern Canada returning to Philadelphia for the winter of 1749-1750. Kalm then traveled from New Jersey across western Pennsylvania to the eastern Great Lakes, collecting numerous specimens before his return to the city of Brotherly Love in October of 1750. From there, in February, 1751, Kalm sailed for England, and then on to Sweden where he arrived, laden with many new and wonderous plants, upon his professor's door at Uppsala in June.

SPECIES PLANTARUM

For Carl Linnaeus, the idea of a treatment of all the species of the world began initially in 1733 when he first attempted the project. Almost at once he realized it was impossible to do at that time and turned to describing the genera instead. This effort resulted in the publication of *Genera plantarum* published in 1737. He then took a copy of his new book, added blank pages, and began to insert species. From 1746 to 1748 Linnaeus worked on a new draft of *Species plantarum* following the format he had used in his earlier (1738) *Hortus cliffortianus*. This proved equally impossible but for somewhat different reasons.

Much as Morison, Sherard and Dillenius realized the need for a new edition of Bauhin's *Pinax*, so too did Linnaeus when it came to eval-

uating the vast number of polynomials that had been published since 1623. The prospects of producing such a work was essentially nil. Dillenius had been unable to complete the work, and no doubt Linnaeus knew of the difficulties he had had and did not see any way of resolving them himself. Linnaeus did not see himself traveling now to London and reviewing the many collections or publications associated with the writings of Ray, Plukenet and Petiver, and it was these writers, in large part, whose nomenclature was uncertain and confusing. Certainly Linnaeus had been able to resolve some problems when working Gronovius' *Flora virginica*, but all of these men had published new species from all over the world. Particularly troublesome was Petiver who had described plants not only from the Carolinas and Florida of North America, but species from the interior of China, far off Japan, and remote regions of Africa. Linnaeus could not have a complete list of synonymy for each and every name; he had to rethink his manuscript and what he hoped to accomplish.

Linnaeus completed about a third of his proposed *Species plantarum* from 1746 to 1748 when he once again set the manuscript aside. He had not yet adopted the binomial system of nomenclature, and other duties prevented him from devoting the kind of time needed to do the work. Thus the book remained until June of 1751 when Kalm returned with his collections.

Perhaps spurred by Kalm, Linnaeus once again started on *Species plantarum*. By this time he had conceived of the handy index device of proposing a trivial name -- what we today call the species epithet -- to go along with the cor-

rect scientific phrase name by which each species should be known. He realized that he had to shorten his synonymy and could economically treat the world's flora only by having brief statements as to the distribution of each kind and a phrase name that did not exceed two lines of print. Taking his 1746-1748 draft, Linnaeus managed to rewrite the first 67 printed pages of his book in eight days. By November of 1751 Linnaeus had completed the first part (or volume), and by March, 1752, three-quarters of the text was written. In July, 1752, or some 13 months after beginning, Linnaeus completed the text for *Species plantarum*.

It is obvious that Linnaeus went quickly through the early sections of part one, and took most of his information from his previously written manuscript. Only a few Kalm collections were cited, and occasionally the same species is described later in the book -- in its correct position according to Linnaeus' scheme of classification -- with Linnaeus not realizing he had already treated that plant. As one proceeds through the text, Linnaeus became more exact in the citation of geographical location, his dependency upon Kalm collections for species from temperate North America increased, and he became more critical of his circumscription of genera. However, toward the latter third of the book, as Linnaeus' health began to fail and he began to hurry, he once again is not as careful and more errors appear. *Species plantarum* is filled with errors, omissions and an occasional strange statement. Linnaeus occasionally miscites places of publication, wrong page numbers or the incorrect figure or plate. In some instances Linnaeus gives seem-

ingly bizarre polynomials in synonymy, as in the case of the two Maryland-based polynomials he cites under *Osmunda cinnamomea*. A simple reading of the Latin would quickly show that these names ought to apply to *O. claytoniana*, yet Linnaeus puts them where he did. In large part this was likely due to his observation of specimens of *O. cinnamomea* at the Sherardian Herbarium at the University of Oxford where the names are given on the labels. However, there are also collections, from Maryland, of *O. claytoniana* with these same names also listed, so it is difficult to understand his treatment of these polynomials.

When the first edition of *Species plantarum* appeared in 1753, the botanical community did not immediately jump onto the Linnaean binomial bandwagon. His system of classification had long been criticized, and his critics were not immediately willing to embrace all of his radical departures from the established norm. It is important for modern workers to remember that even Linnaeus did not regard his trivial names as anything more than a convenient means of index his book. Philip Miller, the English gardner who had published his *Gardners dictionary* for years, did not use binomials until 1768 -- and then only in this one edition -- mainly because his book was already alphabetically arranged and did not need an index.

The impact of Linnaeus' *Species plantarum* was slowly felt. When copies finally arrived on the American continent, some workers immediately adopted the idea of binomials. Jane Colden in her unpublished book used them, as did the Bartrams. Alexander Garden used binomials when the species were known to him, but

otherwise used phrase names in his correspondence. With the appearance of the second edition of *Species plantarum* in 1762 and 1763, the trend to binomials was largely established. This new edition contained many new and exciting plants that Linnaeus had received from Jane Colden, Alexander Garden, John and William Bartram, and others who were now exploring and collecting in temperate North America. Not only would Linnaeus describe these species, but others, working elsewhere in Europe, would pen validly published scientific names to these collections and they too would rise in the world of systematic botany.

With the opening of the vast lands to the west of the Appalachian Mountains, the end of French and Indian War in America, and the growth of resident naturalists in America, the field of plant taxonomy and discovery would expand rapidly soon leaving behind even Linnaeus for a new generation of taxonomists.

SUMMARY OF SPECIES PLANTARUM

One cannot underestimate the impact Linnaeus had upon systematic botany. His work, and especially his first edition of *Species plantarum* have, by international agreement, become highly significant to all modern-day workers in the field of systematic botany. Nonetheless, a careful evaluation and summation of Linnaeus' state of knowledge regarding the vascular plants of temperate North America as defined by Linnaeus in 1753 has not been attempted. In the following section such a review will be made. It is necessary first to prepare listings of species, workers and publications by categories, and then to comment on these findings. The following

categories will be given:

1--All species mentioned in the first edition of *Species plantarum* with direct or indirect indication as being in temperate North America. This will include obvious errors made by Linnaeus.

2--A breakdown of these species into distributional groups as reported by Linnaeus, listing first those which Linnaeus considered to occur only in temperate North America; those which occur in this area but also occur elsewhere in the New World; those that occur in temperate North America and elsewhere in the world; and finally, those which Linnaeus does not specifically state to occur in temperate North America, but gives a synonym or reference based upon a temperate North American collection.

3--A listing of vascular plants species named for geographical regions in temperate North America.

4--A listing, with the collection numbers insofar as possible, of the Clayton collections Linnaeus indirectly cites when he gives Gronovius' *Flora virginica* among the list of publications he cites. In some instances Gronovius is basing his information upon a collection made by someone other than Clayton, and this can be discovered only by consulting the Gronovius herbarium now at the British Museum (Natural History) in London. In perhaps a few other instances, Gronovius may not have had a collection in hand, but garden material or information about a particular species in temperate North America and reported it. Most of these particular kinds of instances can be seen for those species which lack a Clayton collection number. However, it must be immediately noted that Clayton did send some specimens without collection numbers, and in some

cases Gronovius failed to give the number in his publication, so it cannot be assumed that in all instances where there is no number that this reference is based on something other than a Clayton sheet. The first list is by species name; the second list is by collection number.

5--A listing of seemingly Kalm collections taken not only from statements in *Species plantarum*, but from Linnaeus' herbarium at the Linnean Society in London. This is to be regarded as an incomplete listing, as it will require a more careful examination of Kalm collections housed elsewhere, and a comparison of those specimens with others in Linnaeus' herbarium before a more finalized list can be completed.

6--A listing of major publications cited by Linnaeus for those species which, in Linnaeus' opinion, were endemic to temperate North American in their distribution. Species with a more widespread distribution are not reviewed at this time.

7--A list of synonymies for some of the vascular plant species reported for temperate North America in Linnaeus' first edition of *Species plantarum*.

The review that follows is based upon observations obtained from these listings. In all instances they should be considered somewhat tentative as it has not been possible to correct errors made by Linnaeus, especially in the citation of literature, nor to review fully the holdings in the British Museum (Natural History) of the Gronovius herbarium. Until these and other similar tasks are completed it will be impossible to fully report on all aspects relative to the first edition of Linnaeus *Species plantarum*.

Vascular Plants from Temperate North America Mentioned in Linnaeus' First Edition of *Species Plantarum*

- Acalypha virginica*
- Acer negundo*
- Acer pensylvanicum*
- Acer rubrum*
- Acer saccharinum*
- Acnida cannabina*
- Acrostichum areolatum*
- Acrostichum platyneuros*
- Acrostichum polypodioides*
- Actaea racemosa*
- Actaea spicata* var. *alba*
- Adiantum pedatum*
- Aesculus pavia*
- Agave virginica*
- Ageratum altissimum*
- Agrimonia eupatoria*
- Agrostis virginica*
- Aletris farinosa*
- Alisma cordifolia*
- Alisma subulata*
- Allium canadense*
- Alsine media*
- Alyssum hyperboreum*
- Amaranthus graecizans*
- Amaranthus hybridus*
- Amaranthus hypocondriacus*
- Amaranthus lividus*
- Amaranthus retroflexus*
- Amaranthus spinosus*
- Amaryllis atamasca*
- Ambrosia artemisiifolia*
- Ambrosia elatior*
- Ambrosia trifida*
- Ammannia ramosior*
- Amorpha fruticosa*
- Anchusa virginiana*
- Andromeda arborea*
- Andromeda calyculata*
- Andromeda mariana*
- Andromeda paniculata*
- Andromeda racemosa*
- Andropogon alopecuroides*
- Andropogon divaricatum*
- Andropogon hirtum*
- Andropogon nutans*
- Andropogon virginicum*
- Anemone dichotoma*
- Anemone hepatica*
- Anemone quinquefolia*
- Anemone thalictroides*
- Anemone virginiana*
- Angelica atropurpurea*
- Angelica lucida*
- Angelica sylvestris*
- Annona glabra*

<i>Annona muricata</i>	<i>Aster undulatus</i>
<i>Annona triloba</i>	<i>Aster vernus</i>
<i>Anthericum calyculatum</i>	<i>Astragalus canadensis</i>
<i>Antirrhinum canadense</i>	<i>Astragalus carolinianus</i>
<i>Antirrhinum elatine</i>	<i>Atriplex halimus</i>
<i>Aphanes arvensis</i>	<i>Atriplex laciniata</i>
<i>Apocynum androsaemifolium</i>	<i>Avena pensylvanica</i>
<i>Apocynum cannabinum</i>	<i>Avena spicata</i>
<i>Aquilegia canadensis</i>	<i>Azalea lutea</i>
<i>Arabis canadensis</i>	<i>Azalea viscosa</i>
<i>Arabis lyrata</i>	
<i>Aralia nudicaulis</i>	<i>Baccharis foetida</i>
<i>Aralia racemosa</i>	<i>Baccharis halimifolia</i>
<i>Aralia spinosa</i>	<i>Baccharis ivaeifolia</i>
<i>Arbutus uva-ursi</i>	<i>Bartsia coccinea</i>
<i>Arenaria rubra</i> var. <i>marina</i>	<i>Betonica annua</i>
<i>Arethusa bulbosa</i>	<i>Betula lenta</i>
<i>Arethusa divaricata</i>	<i>Betula nigra</i>
<i>Arethusa ophioglossoides</i>	<i>Bidens bipinnata</i>
<i>Aristolochia arborescens</i>	<i>Bidens bullata</i>
<i>Aristolochia serpentaria</i>	<i>Bidens frondosa</i>
<i>Arnica maritima</i>	<i>Bidens nivea</i>
<i>Arum dracontium</i>	<i>Bidens pilosa</i>
<i>Arum triphyllum</i>	<i>Bignonia caerulea</i>
<i>Arum virginicum</i>	<i>Bignonia capreolata</i>
<i>Arundo phragmites</i>	<i>Bignonia catalpa</i>
<i>Asarum canadense</i>	<i>Bignonia crucigera</i>
<i>Asarum virginicum</i>	<i>Bignonia radicans</i>
<i>Asclepias amoena</i>	<i>Bignonia sempervirens</i>
<i>Asclepias decumbens</i>	<i>Briza eragrostis</i>
<i>Asclepias incarnata</i>	<i>Bromus ciliatus</i>
<i>Asclepias nivea</i>	<i>Bromus purgans</i>
<i>Asclepias purpurascens</i>	<i>Buchnera americana</i>
<i>Asclepias rubra</i>	<i>Bunias cakile</i>
<i>Asclepias syriaca</i>	<i>Bupthalmum frutescens</i>
<i>Asclepias tuberosa</i>	<i>Bupthalmum helianthoides</i>
<i>Asclepias variagata</i>	<i>Burmannia biflora</i>
<i>Asclepias verticillata</i>	
<i>Ascyrum crux-andreae</i>	<i>Cacalia atriplicifolia</i>
<i>Ascyrum hypericoides</i>	<i>Cacalia porophyllum</i>
<i>Ascyrum villosum</i>	<i>Cacalia suaveolens</i>
<i>Asplenium rhizophyllum</i>	<i>Cactus opuntia</i>
<i>Aster annuus</i>	<i>Cactus pentagonus</i>
<i>Aster concolor</i>	<i>Caesalpinia brasiliensis</i>
<i>Aster cordifolius</i>	<i>Callicarpa americana</i>
<i>Aster divaricatus</i>	<i>Callitricha palustris</i>
<i>Aster dumosus</i>	<i>Caltha palustris</i>
<i>Aster ericoides</i>	<i>Campanula americana</i>
<i>Aster grandiflorus</i>	<i>Campanula perfoliata</i>
<i>Aster laevis</i>	<i>Canna glauca</i>
<i>Aster linariifolius</i>	<i>Cardamine virginica</i>
<i>Aster linifolius</i>	<i>Carduus altissimus</i>
<i>Aster miser</i>	<i>Carduus virginianus</i>
<i>Aster mutabilis</i>	<i>Carex folliculata</i>
<i>Aster novae-angliae</i>	<i>Carex pseudocyperus</i>
<i>Aster novi-belgii</i>	<i>Carex squarrosa</i>
<i>Aster puniceus</i>	<i>Carpinus betulus</i>
<i>Aster rigidus</i>	<i>Carpinus ostrya</i>
<i>Aster tenuifolius</i>	<i>Cassia chamaecrista</i>
<i>Aster tradescantii</i>	<i>Cassia ligustrina</i>

<i>Cassia marilandica</i>	<i>Conyza asteroides</i>
<i>Cassia nictitans</i>	<i>Conyza bifrons</i> var. <i>flosculosa</i>
<i>Cassine peragua</i>	<i>Conyza linifolia</i>
<i>Ceanothus americanus</i>	<i>Coreopsis alternifolia</i>
<i>Celastrus bullatus</i>	<i>Coreopsis angustifolia</i>
<i>Celastrus myrtifolius</i>	<i>Coreopsis auriculata</i>
<i>Celastrus scandens</i>	<i>Coreopsis lanceolata</i>
<i>Celosia paniculata</i>	<i>Coreopsis tripteris</i>
<i>Celtis occidentalis</i>	<i>Coreopsis verticillata</i>
<i>Cenchrus tribuloides</i>	<i>Cornus canadensis</i>
<i>Cephalanthus occidentalis</i>	<i>Cornus florida</i>
<i>Cerastium semidecandrum</i>	<i>Cornus sanguinea</i>
<i>Cercis canadensis</i>	<i>Cracca virginiana</i>
<i>Chaerophyllum arborescens</i>	<i>Crataegus coccinea</i>
<i>Chelidonium glaucium</i>	<i>Crataegus crus-galli</i>
<i>Chelone glabra</i>	<i>Crataegus tomentosa</i>
<i>Chelone hirsuta</i>	<i>Crataegus viridis</i>
<i>Chelone penstemon</i>	<i>Crescentia cujete</i>
<i>Chenopodium album</i>	<i>Crotalaria alba</i>
<i>Chenopodium anthelminticum</i>	<i>Crotalaria perfoliata</i>
<i>Chenopodium virginicum</i>	<i>Crotalaria sagittalis</i>
<i>Chionanthus virginica</i>	<i>Cucubalus stellatus</i>
<i>Chironia angularis</i>	<i>Cupressus distichia</i>
<i>Chironia campanulata</i>	<i>Cupressus thyoides</i>
<i>Chironia dodecandra</i>	<i>Cuscuta americana</i>
<i>Chrysanthemum arcticum</i>	<i>Cynanchum hirtum</i>
<i>Chrysanthemum serotinum</i>	<i>Cynanchum suberosum</i>
<i>Chrysocoma graminifolia</i>	<i>Cynoglossum virginianum</i>
<i>Chrysogonium virginianum</i>	<i>Cynosurus aegyptius</i>
<i>Chrysosplenium oppositifolium</i>	<i>Cyperus arundinacea</i>
<i>Cicuta bulbifera</i>	<i>Cyperus odoratus</i>
<i>Cicuta maculata</i>	<i>Cyperus strigosus</i>
<i>Cinna arundinacea</i>	<i>Cypripedium calceolus</i>
<i>Circaea lutetiana</i>	
var. <i>canadensis</i>	<i>Dactylis cynosuroides</i>
<i>Cissampelos smilacina</i>	<i>Dalibarda repens</i>
<i>Cistus canadensis</i>	<i>Datisca hirta</i>
<i>Claytonia virginica</i>	<i>Datura stramonium</i>
<i>Clematis crispa</i>	<i>Daucus carota</i>
<i>Clematis viorna</i>	<i>Dianthera americana</i>
<i>Clematis vitalba</i>	<i>Dianthus plumarius</i>
<i>Clethra alnifolia</i>	<i>Diodia virginiana</i>
<i>Clinopodium incanum</i>	<i>Dioscorea villosa</i>
<i>Clinopodium rugosum</i>	<i>Diospyros virginiana</i>
<i>Clinopodium vulgare</i>	<i>Dipsacus fullonum</i>
<i>Clitoria mariana</i>	<i>Dirca palustris</i>
<i>Clitoria virginiana</i>	<i>Dodecatheon meadia</i>
<i>Coix dactyloides</i>	<i>Dolichos polystachyus</i>
<i>Coix lacryma-jobi</i>	<i>Dolichos regularis</i>
<i>Collinsonia canadensis</i>	<i>Draba verna</i>
<i>Commelina communis</i>	<i>Dracocephalum virginianum</i>
<i>Commelina erecta</i>	<i>Dracontium foetidum</i>
<i>Convallaria polygonatum</i>	<i>Drosera rotundifolia</i>
<i>Convallaria racemosa</i>	
<i>Convallaria stellata</i>	<i>Elatine hydropiper</i>
<i>Convolvulus carolinus</i>	<i>Elephantopus scaber</i>
<i>Convolvulus hederaceus</i>	<i>Elephantopus tomentosus</i>
<i>Convolvulus panduratus</i>	<i>Elymus canadensis</i>
<i>Convolvulus repens</i>	<i>Elymus hystrix</i>
<i>Convolvulus spithameus</i>	<i>Elymus virginicus</i>

<i>Epigaea repens</i>	<i>Gnaphalium plantaginifolium</i>
<i>Epilobium hirsutum</i>	<i>Gnaphalium purpureum</i>
<i>Equisetum arvense</i>	<i>Comphrena interrupta</i>
<i>Equisetum hyemale</i>	<i>Comphrena serrata</i>
<i>Erigeron camphoratum</i>	<i>Gratiola dubia</i>
<i>Erigeron canadense</i>	<i>Gratiola virginiana</i>
<i>Erigeron philadelphicum</i>	<i>Guilandina dioica</i>
<i>Eriocaulon decangulare</i>	
<i>Eriophorum virginicum</i>	<i>Hamamelis virginiana</i>
<i>Eryngium aquaticum</i>	<i>Hedera quinquefolia</i>
<i>Eryngium foetidum</i>	<i>Hedysarum canadense</i>
<i>Erythrina herbacea</i>	<i>Hedysarum canescens</i>
<i>Erythronium dens-canis</i>	<i>Hedysarum frutescens</i>
<i>Eupatorium altissimum</i>	<i>Hedysarum hirtum</i>
<i>Eupatorium aromaticum</i>	<i>Hedysarum marilandicum</i>
<i>Eupatorium coelestinum</i>	<i>Hedysarum nudiflorum</i>
<i>Eupatorium hyssopifolium</i>	<i>Hedysarum paniculatum</i>
<i>Eupatorium perfoliatum</i>	<i>Hedysarum repens</i>
<i>Eupatorium purpureum</i>	<i>Hedysarum violaceum</i>
<i>Eupatorium rotundifolium</i>	<i>Hedysarum virginicum</i>
<i>Eupatorium scandens</i>	<i>Hedysarum viridiflorum</i>
<i>Eupatorium sessilifolium</i>	<i>Hedysarum volubile</i>
<i>Eupatorium trifoliatum</i>	<i>Helenium autumnale</i>
<i>Euphorbia corollata</i>	<i>Helianthus angustifolius</i>
<i>Euphorbia ipecacuanhae</i>	<i>Helianthus atrorubens</i>
<i>Euphorbia maculata</i>	<i>Helianthus decapetalus</i>
<i>Euphorbia polygonifolia</i>	<i>Helianthus divaricatus</i>
<i>Euphorbia portulacoides</i>	<i>Helianthus giganteus</i>
<i>Euonymus americanus</i>	<i>Helianthus laevis</i>
	<i>Helianthus multiflorus</i>
<i>Fagus pumila</i>	<i>Helianthus strumosus</i>
<i>Ferula canadensis</i>	<i>Heliotropium indicum</i>
<i>Fraxinus americana</i>	<i>Helleborus trifolius</i>
<i>Fumaria cucullaria</i>	<i>Helonias bullata</i>
<i>Fumaria sempervirens</i>	<i>Heuchera americana</i>
	<i>Hibiscus moscheutos</i>
<i>Galax aphylla</i>	<i>Hibiscus palustris</i>
<i>Galium bermudense</i>	<i>Hibiscus virginicus</i>
<i>Galium tinctorium</i>	<i>Hieracium gronovii</i>
<i>Galium trifidum</i>	<i>Hieracium kalmii</i>
<i>Gaultheria procumbens</i>	<i>Hieracium paniculatum</i>
<i>Gaura biennis</i>	<i>Hieracium venosum</i>
<i>Gentiana ciliata</i>	<i>Hippophae canadensis</i>
<i>Gentiana quinquefolia</i>	<i>Holcus laxus</i>
<i>Gentiana saponaria</i>	<i>Holcus striatus</i>
<i>Gentiana villosa</i>	<i>Holosteum succulentum</i>
<i>Geranium carolinianum</i>	<i>Hordeum jubatum</i>
<i>Geranium maculatum</i>	<i>Horminum virginicum</i>
<i>Gerardia flava</i>	<i>Houstonia caerulea</i>
<i>Gerardia pedicularia</i>	<i>Houstonia purpurea</i>
<i>Gerardia purpurea</i>	<i>Hydrangea arborescens</i>
<i>Geum virginianum</i>	<i>Hydrocotyle americana</i>
<i>Glechoma triacanthos</i>	<i>Hydrocotyle umbellata</i>
<i>Glycine apios</i>	<i>Hydrophyllum virginianum</i>
<i>Glycine bracteata</i>	<i>Hyoseris virginica</i>
<i>Glycine comosa</i>	<i>Hypericum ascyron</i>
<i>Glycine frutescens</i>	<i>Hypericum canadense</i>
<i>Glycine tomentosa</i>	<i>Hypericum kalmianum</i>
<i>Gnaphalium margaritaceum</i>	<i>Hypericum lasianthus</i>
<i>Gnaphalium obtusifolium</i>	<i>Hypericum mutilum</i>

<i>Hypericum setosum</i>	<i>Ludwigia alternifolia</i>
<i>Hyssopus nepetoides</i>	<i>Lupinus perennis</i>
<i>Ilex aquifolium</i>	<i>Lycopodium alopecuroides</i>
<i>Ilex cassine</i>	<i>Lycopodium apodum</i>
<i>Impatiens noli-tangere</i>	<i>Lycopodium carolinianum</i>
<i>Ipomoea carolina</i>	<i>Lycopodium complanatum</i>
<i>Ipomoea lacunosa</i>	<i>Lycopodium obscurum</i>
<i>Ipomoea nyctelea</i>	<i>Lycopodium rupestre</i>
<i>Ipomoea tannifolia</i>	<i>Lycopsis virginica</i>
<i>Iris verna</i>	<i>Lycopus virginicus</i>
<i>Iris versicolor</i>	<i>Lysimachia ciliata</i>
<i>Iris virginica</i>	<i>Lysimachia punctata</i>
<i>Isnardia palustris</i>	<i>Lysimachia quadrifolia</i>
<i>Itea virginica</i>	<i>Lythrum lineare</i>
<i>Iva frutescens</i>	<i>Lythrum petiolatum</i>
	<i>Lythrum verticillatum</i>
<i>Juglans alba</i>	<i>Magnolia virginiana</i>
<i>Juglans nigra</i>	<i>Magnolia virginiana</i>
<i>Juncus bulbosus</i>	var. <i>acuminata</i>
<i>Juncus campestris</i>	<i>Magnolia virginiana</i>
<i>Juncus effusus</i>	var. <i>foetida</i>
<i>Juncus filiformis</i>	<i>Magnolia virginiana</i>
<i>Juniperus virginiana</i>	var. <i>glaucia</i>
<i>Jussiaea erecta</i>	<i>Magnolia virginiana</i>
	var. <i>grisea</i>
<i>Kalmia angustifolia</i>	<i>Magnolia virginiana</i>
<i>Kalmia latifolia</i>	var. <i>tripetala</i>
<i>Lactuca canadensis</i>	<i>Malva caroliniana</i>
<i>Lamium amplexicaule</i>	<i>Medeola virginiana</i>
<i>Laurus aestivalis</i>	<i>Medicago virginica</i>
<i>Laurus benzoin</i>	<i>Melanthium virginicum</i>
<i>Laurus borbonia</i>	<i>Melica altissima</i>
<i>Laurus indica</i>	<i>Melissa nepeta</i>
<i>Laurus sassafras</i>	<i>Melissa pulegioides</i>
<i>Laurus winterana</i>	<i>Melothria pendula</i>
<i>Lechea major</i>	<i>Menispermum canadense</i>
<i>Lechea minor</i>	<i>Menispermum carolinum</i>
<i>Leontice thalictroides</i>	<i>Menispermum virginicum</i>
<i>Leontodon dandelion</i>	<i>Mentha canadensis</i>
<i>Lepidium virginicum</i>	<i>Mentha spicata</i> var. <i>viridis</i>
<i>Ligusticum scoticum</i>	<i>Mentzelia aspera</i>
<i>Lilium camtschatcense</i>	<i>Mespilus arbutifolia</i>
<i>Lilium canadense</i>	<i>Mespilus canadensis</i>
<i>Limodorum tuberosum</i>	<i>Mimulus ringens</i>
<i>Linnaea borealis</i>	<i>Mitchella repens</i>
<i>Linum virginianum</i>	<i>Mitella diphylla</i>
<i>Liquidambar peregrina</i>	<i>Mollugo verticillata</i>
<i>Liquidambar styraciflua</i>	<i>Monarda ciliata</i>
<i>Liriodendron tulipifera</i>	<i>Monarda clinopodia</i>
<i>Lithospermum virginianum</i>	<i>Monarda didyma</i>
<i>Lobelia cardinalis</i>	<i>Monarda fistulosa</i>
<i>Lobelia cliffortiana</i>	<i>Monarda punctata</i>
<i>Lobelia inflata</i>	<i>Monotropa hypopithys</i>
<i>Lobelia kalmii</i>	<i>Monotropa uniflora</i>
<i>Lobelia siphilitica</i>	<i>Morus rubra</i>
<i>Lonicera marilandica</i>	<i>Myosotis virginiana</i>
<i>Lonicera sempervirens</i>	<i>Myrica asplenifolia</i>
<i>Lonicera symphoricarpos</i>	<i>Myrica cerifera</i>

<i>Napaea dioica</i>	<i>Philadelphus inodorus</i>
<i>Napaea hermaphrodita</i>	<i>Phlox divaricata</i>
<i>Nepeta virginica</i>	<i>Phlox glaberrima</i>
<i>Nicotiana rustica</i>	<i>Phlox maculata</i>
<i>Nymphaea alba</i>	<i>Phlox ovata</i>
<i>Nymphaea lotus</i>	<i>Phlox paniculata</i>
<i>Nymphaea lutea</i>	<i>Phlox pilosa</i>
<i>Nymphaea nelumbo</i>	<i>Phlox setacea</i>
<i>Nyssa aquatica</i>	<i>Phlox subulata</i>
	<i>Phryma leptostachya</i>
<i>Obolaria virginica</i>	<i>Physalis pruinosa</i>
<i>Oenothera biennis</i>	<i>Physalis pubescens</i>
<i>Oenothera fruticosa</i>	<i>Physalis viscosa</i>
<i>Oenothera mollissima</i>	<i>Phytolacca americana</i>
<i>Oldenlandia uniflora</i>	<i>Pinus balsamea</i>
<i>Onoclea sensibilis</i>	<i>Pinus strobus</i>
<i>Ophiorrhiza mitreola</i>	<i>Pinus taeda</i>
<i>Ophrys cernua</i>	<i>Pistacia simaruba</i>
<i>Ophrys liliifolia</i>	<i>Plantago virginica</i>
<i>Orchis ciliaris</i>	<i>Platanus occidentalis</i>
<i>Orchis flava</i>	<i>Poa capillaris</i>
<i>Orchis psycodes</i>	<i>Poa compressa</i>
<i>Orchis spectabilis</i>	<i>Poa flava</i>
<i>Origanum vulgare</i>	<i>Podophyllum diphylum</i>
<i>Ornithogalum bivale</i>	<i>Podophyllum peltatum</i>
<i>Ornithogalum canadense</i>	<i>Polemonium caeruleum</i>
<i>Ornithogalum hirsutum</i>	<i>Polemonium dubium</i>
<i>Orobanche uniflora</i>	<i>Polemonium rubrum</i>
<i>Orobanche virginiana</i>	<i>Polygala cruciata</i>
<i>Orontium aquaticum</i>	<i>Polygala incarnata</i>
<i>Osmunda cinnamomea</i>	<i>Polygala lutea</i>
<i>Osmunda claytoniana</i>	<i>Polygala sanguinea</i>
<i>Osmunda regalis</i>	<i>Polygala senega</i>
<i>Osmunda virginiana</i>	<i>Polygala verticillata</i>
<i>Osteospermum uvedalia</i>	<i>Polygala viridescens</i>
<i>Othonna cineraria</i>	<i>Polygonum arifolium</i>
<i>Oxalis longiflora</i>	<i>Polygonum articulatum</i>
<i>Oxalis stricta</i>	<i>Polygonum aviculare</i>
<i>Oxalis violacea</i>	<i>Polygonum convolvulus</i>
	<i>Polygonum erectum</i>
<i>Panax quinquefolius</i>	<i>Polygonum maritimum</i>
<i>Panax trifolius</i>	<i>Polygonum pensylvanicum</i>
<i>Pancratium carolinianum</i>	<i>Polygonum persicaria</i>
<i>Panicum capillare</i>	<i>Polygonum sagittatum</i>
<i>Panicum clandestinum</i>	<i>Polygonum scandens</i>
<i>Panicum crusgalli</i>	<i>Polygonum virginianum</i>
<i>Panicum dichotomum</i>	<i>Polypodium bulbiferum</i>
<i>Panicum dissectum</i>	<i>Polypodium lonchitis</i>
<i>Panicum filiforme</i>	<i>Polypodium marginale</i>
<i>Panicum glaucum</i>	<i>Polypodium noveboracense</i>
<i>Panicum italicum</i>	<i>Polypodium phegopteris</i>
<i>Panicum latifolium</i>	<i>Polygonum virginianum</i>
<i>Panicum sanguinale</i>	<i>Polypremum procumbens</i>
<i>Panicum virgatum</i>	<i>Populus balsamifera</i>
<i>Parthenium integrifolium</i>	<i>Populus heterophylla</i>
<i>Passiflora incarnata</i>	<i>Populus nigra</i>
<i>Passiflora lutea</i>	<i>Polymnia canadensis</i>
<i>Penthorum sedoides</i>	<i>Pontederia cordata</i>
<i>Phalaris oryzoides</i>	<i>Portulaca oleracea</i>
<i>Phaseolus helvulus</i>	<i>Potamogeton nutans</i>

<i>Potentilla canadensis</i>	<i>Sagina virginica</i>
<i>Potentilla norvegica</i>	<i>Sagittaria sagittifolia</i>
<i>Potentilla reptans</i>	<i>Salicornia virginia</i>
<i>Prenanthes alba</i>	<i>Salsola kali</i>
<i>Prenanthes altissima</i>	<i>Salsola prostrata</i>
<i>Prinos glaber</i>	<i>Salvia lyrata</i>
<i>Prinos verticillatus</i>	<i>Salvia urticifolia</i>
<i>Proserpinaca palustris</i>	<i>Sambucus canadensis</i>
<i>Prunus lusitanica</i>	<i>Samolus valerandii</i>
<i>Prunus virginiana</i>	<i>Sanguinaria canadensis</i>
<i>Ptelea trifoliata</i>	<i>Sanguisorba canadensis</i>
<i>Pteris atropurpurea</i>	<i>Sanicula canadensis</i>
<i>Pulmonaria virginica</i>	<i>Sanicula europaea</i>
<i>Pyrola maculata</i>	<i>Sanicula marilandica</i>
<i>Pyrola rotundifolia</i>	<i>Saponaria officinalis</i>
<i>Pyrola umbellata</i>	<i>Sarothra gentianoides</i>
<i>Pyrus coronaria</i>	<i>Sarracenia flava</i>
 	<i>Sarracenia purpurea</i>
<i>Quercus alba</i>	<i>Satureja origanoides</i>
<i>Quercus nigra</i>	<i>Satureja virginiana</i>
<i>Quercus phellos</i>	<i>Saururus cernuus</i>
<i>Quercus prinus</i>	<i>Saxifraga nivalis</i>
<i>Quercus rubra</i>	<i>Saxifraga pensylvanica</i>
<i>Queria canadensis</i>	<i>Scandix cerefolium</i>
 	<i>Scandix procumbens</i>
<i>Ranunculus abortivus</i>	<i>Schwalbea americana</i>
<i>Ranunculus repens</i>	<i>Schoenus glomeratus</i>
<i>Renealmia usneoides</i>	<i>Scirpus capitatus</i>
<i>Rhexia mariana</i>	<i>Scirpus glomeratus</i>
<i>Rhexia virginica</i>	<i>Scirpus retrofractus</i>
<i>Rhinanthus virginica</i>	<i>Scirpus spadiceus</i>
<i>Rhododendron maximum</i>	<i>Scrophularia marilandica</i>
<i>Rhus copallina</i>	<i>Scrophularia nodosa</i>
<i>Rhus glabra</i>	<i>Scutellaria hyssopifolia</i>
<i>Rhus radicans</i>	<i>Scutellaria integrifolia</i>
<i>Rhus toxicodendron</i>	<i>Scutellaria lateriflora</i>
<i>Rhus vernix</i>	<i>Senecio aureus</i>
<i>Ribes cynosbati</i>	<i>Senecio canadensis</i>
<i>Ribes nigrum</i>	<i>Senecio hieracifolius</i>
<i>Ribes oxyacanthoides</i>	<i>Serratula glauca</i>
<i>Robinia pseudoacacia</i>	<i>Serratula noveboracensis</i>
<i>Rosa carolina</i>	<i>Serratula praeculta</i>
<i>Rubus caesius</i>	<i>Serratula scariosa</i>
<i>Rubus canadensis</i>	<i>Serratula spicata</i>
<i>Rubus fruticosus</i>	<i>Serratula squarrosa</i>
<i>Rubus hispida</i>	<i>Sicyos angulata</i>
<i>Rubus odoratus</i>	<i>Sida abutilon</i>
<i>Rubus occidentalis</i>	<i>Sida crispa</i>
<i>Rudbeckia hirta</i>	<i>Sida rhombifolia</i>
<i>Rudbeckia laciniata</i>	<i>Sida spinosa</i>
<i>Rudbeckia oppositifolia</i>	<i>Sigesbeckia occidentalis</i>
<i>Rudbeckia purpurea</i>	<i>Silene antirrhina</i>
<i>Rudbeckia triloba</i>	<i>Silene nocturna</i>
<i>Ruellia biflora</i>	<i>Silene virginica</i>
<i>Ruellia strepens</i>	<i>Silphium asteriscus</i>
<i>Rumex acetosella</i>	<i>Silphium helianthoides</i>
<i>Rumex britannica</i>	<i>Silphium laciniatum</i>
<i>Rumex persicarioides</i>	<i>Silphium solidaginoides</i>
<i>Rumex sanguineus</i>	<i>Silphium trifoliatum</i>
<i>Rumex verticillatus</i>	<i>Sison canadense</i>

<i>Sisymbrium nasturtium-aquaticum</i>	<i>Thalictrum purpurascens</i>
<i>Sisyrinchium bermudiana</i>	<i>Thaspia trifoliata</i>
<i>Sium rigidus</i>	<i>Thesium umbellatum</i>
<i>Sloanea emarginata</i>	<i>Thuja occidentalis</i>
<i>Smilax bona-nox</i>	<i>Tiarella cordifolia</i>
<i>Smilax caduca</i>	<i>Tilia americana</i>
<i>Smilax herbacea</i>	<i>Tradescantia virginiana</i>
<i>Smilax lanceolata</i>	<i>Tragopogon virginicum</i>
<i>Smilax laurifolia</i>	<i>Trichostema brachiatum</i>
<i>Smilax pseudo-china</i>	<i>Trichostema dichotomum</i>
<i>Smilax rotundifolia</i>	<i>Trifolium arvense</i>
<i>Smilax sarsaparilla</i>	<i>Trifolium biflorum</i>
<i>Smilax tamnoides</i>	<i>Trifolium comosum</i>
<i>Smyrnium aureum</i>	<i>Trifolium reflexum</i>
<i>Smyrnium integrerrimum</i>	<i>Trifolium repens</i>
<i>Solanum carolinense</i>	<i>Trillium cernuum</i>
<i>Solanum diphylllum</i>	<i>Trillium erectum</i>
<i>Solanum mammosum</i>	<i>Trillium sessile</i>
<i>Solanum nigrum</i> var. <i>virginicum</i>	<i>Triosteum angustifolium</i>
<i>Solanum nigrum</i> var. <i>vulgare</i>	<i>Triosteum perfoliatum</i>
<i>Solanum tomentosum</i>	<i>Ulmus americana</i>
<i>Solanum verbascifolium</i>	<i>Uniola paniculata</i>
<i>Solanum virginianum</i>	<i>Uniola spicata</i>
<i>Solidago altissima</i>	<i>Urtica canadensis</i>
<i>Solidago caesia</i>	<i>Urtica capitata</i>
<i>Solidago canadensis</i>	<i>Urtica cylindrica</i>
<i>Solidago flexicaulis</i>	<i>Urtica divaricata</i>
<i>Solidago lateriflora</i>	<i>Urtica pumila</i>
<i>Solidago latifolia</i>	<i>Utricularia gibba</i>
<i>Solidago noveboracensis</i>	<i>Utricularia subulata</i>
<i>Solidago rigida</i>	<i>Uvularia perfoliata</i>
<i>Solidago sempervirens</i>	<i>Uvularia sessilifolia</i>
<i>Sonchus canadensis</i>	<i>Vaccinium album</i>
<i>Sonchus floridanus</i>	<i>Vaccinium corymbosum</i>
<i>Sophora tinctoria</i>	<i>Vaccinium frondosum</i>
<i>Sparganium erectum</i>	<i>Vaccinium hispida</i>
<i>Spermacoce tenuior</i>	<i>Vaccinium ligustrinum</i>
<i>Spiraea aruncus</i>	<i>Vaccinium mucronatum</i>
<i>Spiraea hypericifolia</i>	<i>Vaccinium stamineum</i>
<i>Spiraea opulifolia</i>	<i>Valeriana cornucopiae</i>
<i>Spiraea tomentosa</i>	<i>Valeriana locusta</i> var. <i>radiata</i>
<i>Spiraea trifoliata</i>	<i>Veratrum luteum</i>
<i>Staphylea trifolia</i>	<i>Verbena hastata</i>
<i>Statice armeria</i>	<i>Verbena nodiflora</i>
<i>Statice limonium</i>	<i>Verbena spuria</i>
<i>Stewartia malacodendron</i>	<i>Verbena urticifolia</i>
<i>Stipa avenacea</i>	<i>Verbesina alba</i>
<i>Swertia corniculata</i>	<i>Verbesina virginica</i>
<i>Swertia difformis</i>	<i>Veronica anagallis-aquatica</i>
<i>Taxus baccata</i>	<i>Vernonica arvensis</i>
<i>Tetracera volubilis</i>	<i>Veronica beccabunga</i>
<i>Tetragonotheca helianthoides</i>	<i>Veronica marilandica</i>
<i>Teucrium canadense</i>	<i>Veronica serpyllifolia</i>
<i>Teucrium chamaepitys</i>	<i>Veronica virginica</i>
<i>Teucrium virginicum</i>	<i>Viburnum acerifolium</i>
<i>Thalictrum cornutii</i>	<i>Viburnum dentatum</i>
<i>Thalictrum dioicum</i>	<i>Viburnum lentago</i>
	<i>Viburnum nudum</i>

<i>Viburnum prunifolium</i>	<i>Bignonia capreolata</i>
<i>Viola canadensis</i>	<i>Bignonia radicans</i>
<i>Viola lanceolata</i>	<i>Buphtalmum helianthoides</i>
<i>Viola palmata</i>	<i>Cacalia porophyllum</i>
<i>Viola pedata</i>	<i>Cactus pentagonus</i>
<i>Viola primulifolia</i>	<i>Campanula americana</i>
<i>Viscum purpureum</i>	<i>Celosia paniculata</i>
<i>Viscum rubrum</i>	<i>Cephalanthus occidentalis</i>
<i>Viscum terrestre</i>	<i>Chionanthus virginica</i>
<i>Vitex agnus-castus</i>	<i>Chrysanthemum serotinum</i>
<i>Vitis arborea</i>	<i>Circaea lutetiana</i>
<i>Vitis labrusca</i>	var. <i>canadensis</i>
<i>Vitis laciniosa</i>	<i>Clitoria mariana</i>
<i>Vitis vinifera</i>	<i>Coix dactyloides</i>
<i>Vitis vulpina</i>	<i>Commelina communis</i>
<i>Xanthium strumarium</i>	<i>Convolvulus repens</i>
<i>Xyris indica</i>	<i>Conyza asteroides</i>
<i>Yucca filamentosa</i>	<i>Cynanchum hirtum</i>
<i>Yucca gloriosa</i>	<i>Cyperus odoratus</i>
<i>Zannichellia palustris</i>	<i>Diospyros virginiana</i>
<i>Zanthoxylum clava-herculis</i>	<i>Dracocephalum virginianum</i>
<i>Zizania aquatica</i>	<i>Eriocalon decangulare</i>
Vascular Plants from Temperate North America Mentioned in Linnaeus' First Edition of Species Plantarum as Occurring only in Temperate North America	
America	
<i>Actaea spicata</i> var. <i>alba</i>	<i>Gomphrena interrupta</i>
<i>Aletris farinosa</i>	<i>Gomphrena serrata</i>
<i>Alyssum hyperboreum</i>	<i>Hedysarum volubile</i>
<i>Andropogon alopecuroides</i>	<i>Helenium autumnale</i>
<i>Andropogon virginicum</i>	<i>Helianthus divaricatus</i>
<i>Annona muricata</i>	<i>Hydrocotyle americana</i>
<i>Arabis canadensis</i>	<i>Hydrocotyle umbellata</i>
<i>Arethusa divaricata</i>	<i>Jussiaea erecta</i>
<i>Aristolochia arborescens</i>	<i>Limodorum tuberosum</i>
<i>Arum dracontium</i>	<i>Liriodendron tulipifera</i>
<i>Asclepias amoena</i>	<i>Mentzelia aspera</i>
<i>Asclepias tuberosa</i>	<i>Mitella diphylla</i>
<i>Asclepias variagata</i>	<i>Myrica asplenifolia</i>
<i>Aster dumosus</i>	<i>Nyssa aquatica</i>
<i>Aster ericoides</i>	<i>Osmunda virginiana</i>
<i>Aster grandiflorus</i>	<i>Panicum filiforme</i>
<i>Aster laevis</i>	<i>Panicum latifolium</i>
<i>Aster linariifolius</i>	<i>Phlox paniculata</i>
<i>Aster linifolius</i>	<i>Phryma leptostachya</i>
<i>Aster miser</i>	<i>Physalis pruinosa</i>
<i>Aster mutabilis</i>	<i>Platanus occidentalis</i>
<i>Aster puniceus</i>	<i>Podophyllum peltatum</i>
<i>Aster tenuifolius</i>	<i>Polygonum aviculare</i>
<i>Aster undulatus</i>	<i>Populus balsamifera</i>
<i>Bidens bullata</i>	<i>Pyrola maculata</i>
<i>Bidens frondosa</i>	<i>Quercus nigra</i>
<i>Bidens pilosa</i>	<i>Quercus phellos</i>
	<i>Quercus prinus</i>
	<i>Rhus copallina</i>
	<i>Rhus glabra</i>
	<i>Sanguinaria canadensis</i>
	<i>Sarracenia flava</i>
	<i>Sarracenia purpurea</i>
	<i>Schwalbea americana</i>

<i>Senecio hieracifolius</i>	<i>Cistus canadensis</i>
<i>Serratula spicata</i>	<i>Collinsonia canadensis</i>
<i>Silphium laciniatum</i>	<i>Convallaria racemosa</i>
<i>Sison canadense</i>	<i>Convallaria stellata</i>
<i>Smyrnium aureum</i>	<i>Conyza bifrons</i>
<i>Solanum diphylum</i>	var. <i>flosculososa</i>
<i>Solanum tomentosum</i>	<i>Conyza linifolia</i>
<i>Solanum verbascifolium</i>	<i>Coreopsis alternifolia</i>
<i>Solanum virginianum</i>	<i>Cornus canadensis</i>
<i>Solidago altissima</i>	<i>Cracca virginiana</i>
<i>Solidago caesia</i>	<i>Crataegus coccinea</i>
<i>Solidago lateriflora</i>	<i>Cucubalus stellata</i>
<i>Solidago noveboracensis</i>	<i>Cupressus thyoides</i>
<i>Trichostema brachiatum</i>	<i>Dalibarda repens</i>
<i>Trifolium comosum</i>	<i>Elymus canadensis</i>
<i>Triosteum perfoliatum</i>	<i>Epigaea repens</i>
<i>Uniola spicata</i>	<i>Erigeron philadelphicum</i>
<i>Vaccinium corymbosum</i>	<i>Eupatorium rotundifolium</i>
<i>Vaccinium frondosum</i>	<i>Euphorbia corollata</i>
<i>Vaccinium mucronatum</i>	<i>Euphorbia ipecacuanhae</i>
<i>Vaccinium stamineum</i>	<i>Euphorbia polygonifolia</i>
<i>Vitis labrusca</i>	<i>Fumaria coccinea</i>
Canada	<i>Fumaria sempervirens</i>
<i>Actaea racemosa</i>	<i>Galium trifidum</i>
<i>Adiantum pedatum</i>	<i>Gaultheria procumbens</i>
<i>Ageratum altissimum</i>	<i>Gerardia flava</i>
<i>Allium canadense</i>	<i>Gerardia pedicularia</i>
<i>Ambrosia elatior</i>	<i>Gerardia purpurea</i>
<i>Ambrosia trifida</i>	<i>Guilandina dioica</i>
<i>Anemone quinquefolia</i>	<i>Hedera quinquefolia</i>
<i>Anemone thalictroides</i>	<i>Hedysarum canadense</i>
<i>Angelica atropurpurea</i>	<i>Helianthus decapetalus</i>
<i>Angelica lucida</i>	<i>Helianthus giganteus</i>
<i>Antirrhinum canadense</i>	<i>Helianthus strumosus</i>
<i>Apocynum androsaemifolium</i>	<i>Hibiscus moscheutos</i>
<i>Apocynum cannabinum</i>	<i>Hibiscus palustris</i>
<i>Aquilegia canadensis</i>	<i>Hieracium paniculatum</i>
<i>Arabis lyrata</i>	<i>Hippophae canadensis</i>
<i>Aralia racemosa</i>	<i>Holcus laxus</i>
<i>Arethusa bulbosa</i>	<i>Hordeum jubatum</i>
<i>Arethusa ophioglossoides</i>	<i>Hypericum canadense</i>
<i>Asarum canadense</i>	<i>Hypericum mutilum</i>
<i>Asclepias incarnata</i>	<i>Hyssopus nepetoides</i>
<i>Aster annuus</i>	<i>Lactuca canadensis</i>
<i>Astragalus canadensis</i>	<i>Lechea major</i>
<i>Betula lenta</i>	<i>Lechea minor</i>
<i>Betula nigra</i>	<i>Lilium canadense</i>
<i>Bromus ciliatus</i>	<i>Liquidambar peregrina</i>
<i>Bromus purgans</i>	<i>Lobelia cliffortiana</i>
<i>Buchnera americana</i>	<i>Lobelia inflata</i>
<i>Cacalia atriplicifolia</i>	<i>Lobelia kalmii</i>
<i>Carex folliculata</i>	<i>Lycopodium alopecuroides</i>
<i>Carex squarrosa</i>	<i>Lysimachia ciliata</i>
<i>Celastrus scandens</i>	<i>Melissa pulegioides</i>
<i>Chelone glabra</i>	<i>Menispermum canadense</i>
<i>Chironia campanulata</i>	<i>Mentha canadensis</i>
<i>Chrysocoma graminifolia</i>	<i>Mespilus canadensis</i>
<i>Cicuta bulbifera</i>	<i>Mimulus ringens</i>
<i>Cinna arundinacea</i>	<i>Monarda fistulosa</i>
	<i>Monotropa uniflora</i>

<i>Ophrys cernua</i>	<i>Veratrum luteum</i>
<i>Orchis ciliaris</i>	<i>Verbena hastata</i>
<i>Orchis psycodes</i>	<i>Verbena spuria</i>
<i>Ornithogalum hirsutum</i>	<i>Verbena urticifolia</i>
<i>Orontium aquaticum</i>	<i>Viburnum lentago</i>
<i>Othonna cineraria</i>	<i>Viburnum prunifolium</i>
<i>Oxalis violacea</i>	<i>Viola canadensis</i>
<i>Panax quinquefolius</i>	
<i>Pinus balsamea</i>	
<i>Pinus strobus</i>	
<i>Pinus taeda</i>	
<i>Poa capillaris</i>	Carolina
<i>Polygala incarnata</i>	<i>Amorpha fruticosa</i>
<i>Polygonum articulatum</i>	<i>Andromeda arborea</i>
<i>Polypodium bulbiferum</i>	<i>Annona glabra</i>
<i>Polypodium marginale</i>	<i>Annona triloba</i>
<i>Polypodium noveboracense</i>	<i>Asarum virginicum</i>
<i>Polymnia canadensis</i>	<i>Asclepias purpurascens</i>
<i>Potentilla canadensis</i>	<i>Astragalus carolinianus</i>
<i>Prenanthes altissima</i>	<i>Bidens nivea</i>
<i>Prinos glaber</i>	<i>Bignonia caerulea</i>
<i>Queria canadensis</i>	<i>Callicarpa americana</i>
<i>Ranunculus abortivus</i>	<i>Canna glauca</i>
<i>Rhus radicans</i>	<i>Carduus altissimus</i>
<i>Rhus toxicodendron</i>	<i>Ceanothus americanus</i>
<i>Ribes cynosbati</i>	<i>Cissampelos smilacina</i>
<i>Ribes oxyacanthoides</i>	<i>Clematis crispa</i>
<i>Rubus canadensis</i>	<i>Clematis viorna</i>
<i>Rubus hispida</i>	<i>Clethra alnifolia</i>
<i>Rubus odoratus</i>	<i>Convolvulus carolinus</i>
<i>Rubus occidentalis</i>	<i>Coreopsis lanceolata</i>
<i>Rudbeckia hirta</i>	<i>Crotalaria alba</i>
<i>Rudbeckia laciniata</i>	<i>Crotalaria perfoliata</i>
<i>Sanguisorba canadensis</i>	<i>Cupressus distichia</i>
<i>Saxifraga pensylvanica</i>	<i>Erythrina herbacea</i>
<i>Scutellaria integrifolia</i>	<i>Eupatorium coelestinum</i>
<i>Scutellaria lateriflora</i>	<i>Fraxinus americana</i>
<i>Senecio aureus</i>	<i>Geranium carolinianum</i>
<i>Senecio canadensis</i>	<i>Glycine frutescens</i>
<i>Smilax caduca</i>	<i>Gnaphalium purpureum</i>
<i>Smilax rotundifolia</i>	<i>Hedysarum marilandicum</i>
<i>Solidago canadensis</i>	<i>Horminum virginicum</i>
<i>Solidago flexicaulis</i>	<i>Ilex cassine</i>
<i>Solidago latifolia</i>	<i>Ipomoea carolina</i>
<i>Solidago sempervirens</i>	<i>Ipomoea lacunosa</i>
<i>Sonchus canadensis</i>	<i>Ipomoea tannifolia</i>
<i>Sonchus floridanus</i>	<i>Juniperus virginiana</i>
<i>Spiraea trifoliata</i>	<i>Laurus borbonia</i>
<i>Teucrium canadense</i>	<i>Laurus sassafras</i>
<i>Thalictrum cornutii</i>	<i>Lonicera marilandica</i>
<i>Thalictrum dioicum</i>	<i>Lonicera symphoricarpos</i>
<i>Thalictrum purpurascens</i>	<i>Lycopodium apodum</i>
<i>Tilia americana</i>	<i>Lycopodium carolinanum</i>
<i>Tragopogon virginicum</i>	<i>Magnolia virginiana</i>
<i>Trifolium biflorum</i>	var. <i>acuminata</i>
<i>Urtica capitata</i>	var. <i>foetida</i>
<i>Urtica divaricata</i>	var. <i>glauca</i>
<i>Urtica pumila</i>	var. <i>grisea</i>
<i>Uvularia perfoliata</i>	var. <i>tripetala</i>
<i>Uvularia sessilifolia</i>	<i>Malva caroliniana</i>
	<i>Menispermum carolinum</i>
	<i>Menispermum virginicum</i>
	<i>Mitchella repens</i>

Myrica cerifera	New England
<i>Phaseolus helvulus</i>	<i>Aster novae-angliae</i>
<i>Philadelphus inodorus</i>	
<i>Polemonium rubrum</i>	
<i>Polypremum procumbens</i>	
<i>Prenanthes alba</i>	
<i>Quercus rubra</i>	
<i>Rosa carolina</i>	
<i>Rudbeckia purpurea</i>	
<i>Ruellia biflora</i>	
<i>Ruellia strepens</i>	
<i>Serratula glauca</i>	
<i>Serratula praealta</i>	
<i>Silene antirrhina</i>	
<i>Silphium asteriscus</i>	
<i>Sloanea emarginata</i>	
<i>Smilax bona-nox</i>	
<i>Smilax laurifolia</i>	
<i>Smilax tamnoides</i>	
<i>Solanum carolinense</i>	
<i>Spermacoce tenuior</i>	
<i>Spiraea hypericifolia</i>	
<i>Spiraea opulifolia</i>	
<i>Trillium cernuum</i>	
<i>Trillium sessile</i>	
<i>Uniola paniculata</i>	
<i>Viscum purpureum</i>	
<i>Viscum rubrum</i>	
<i>Vitis arborea</i>	
Florida	
<i>Actaea racemosa</i>	
<i>Dioscorea villosa</i>	
<i>Laurus sassafras</i>	
<i>Polygonum arifolium</i>	
Maryland	
<i>Acrostichum areolatum</i>	
<i>Asarum virginicum</i>	
<i>Cassia marilandica</i>	
<i>Iris versicolor</i>	
<i>Juglans nigra</i>	
<i>Kalmia latifolia</i>	
<i>Lonicera marilandica</i>	
<i>Mitchella repens</i>	
<i>Monotropa uniflora</i>	
<i>Osmunda cinnamomea</i>	
<i>Polygala senega</i>	
<i>Polygonum sagittatum</i>	
<i>Rhexia mariana</i>	
<i>Sanicula marilandica</i>	
<i>Saururus cernuus</i>	
<i>Serratula glauca</i>	
<i>Smilax herbacea</i>	
<i>Valeriana locusta</i>	
var. <i>radiata</i>	
Mississippi	
<i>Erythrina herbacea</i>	
<i>Silphium laciniatum</i>	
New Jersey	
<i>Kalmia angustifolia</i>	
New York	
<i>Bartsia coccinea</i>	
<i>Holosteum succulentum</i>	
<i>Kalmia angustifolia</i>	
<i>Monarda didyma</i>	
<i>Solidago sempervirens</i>	
Pennsylvania	
<i>Acer pensylvanicum</i>	
<i>Acer rubrum</i>	
<i>Acer saccharinum</i>	
<i>Amaranthus retroflexus</i>	
<i>Ambrosia artemisiifolia</i>	
<i>Andromeda racemosa</i>	
<i>Aster novi-belgii</i>	
<i>Avena pensylvanica</i>	
<i>Clethra alnifolia</i>	
<i>Datiscia hirta</i>	
<i>Eupatorium altissimum</i>	
<i>Euphorbia portulacoides</i>	
<i>Gaura biennis</i>	
<i>Gentiana quinquefolia</i>	
<i>Gnaphalium obtusifolium</i>	
<i>Gnaphalium purpureum</i>	
<i>Helonias bullata</i>	
<i>Hieracium gronovii</i>	
<i>Hieracium kalmii</i>	
<i>Iris versicolor</i>	
<i>Kalmia angustifolia</i>	
<i>Kalmia latifolia</i>	
<i>Linum virginianum</i>	
<i>Lycopodium apodum</i>	
<i>Lycopodium obscurum</i>	
<i>Monarda didyma</i>	
<i>Myrica cerifera</i>	
<i>Panax quinquefolius</i>	
<i>Polygala senega</i>	
<i>Polygonum erectum</i>	
<i>Polygonum pensylvanicum</i>	
<i>Prenanthes alba</i>	
<i>Sarothra gentianoides</i>	
<i>Saxifraga pensylvanica</i>	
<i>Serratula praealta</i>	
<i>Smilax tamnoides</i>	
<i>Solidago rigida</i>	
<i>Spiraea tomentosa</i>	
<i>Thesium umbellatum</i>	
<i>Trichostema dichotomum</i>	
<i>Vaccinium album</i>	
<i>Vaccinium ligustrinum</i>	
<i>Viscum terrestris</i>	
Virginia	
<i>Acer negundo</i>	

<i>Acer rubrum</i>	<i>Bidens bipinnata</i>
<i>Achnida cannabina</i>	<i>Bignonia sempervirens</i>
<i>Acrostichum areolatum</i>	<i>Buchnera americana</i>
<i>Acrostichum platyneuros</i>	<i>Burmannia biflora</i>
<i>Actaea racemosa</i>	<i>Cacalia atriplicifolia</i>
<i>Adiantum pedatum</i>	<i>Cacalia suaveolens</i>
<i>Agave virginica</i>	<i>Callicarpa americana</i>
<i>Ageratum altissimum</i>	<i>Campanula perfoliata</i>
<i>Agrostis virginica</i>	<i>Cardamine virginica</i>
<i>Alisma cordifolia</i>	<i>Carduus virginianus</i>
<i>Alisma subulata</i>	<i>Cassia marilandica</i>
<i>Amaranthus graecizans</i>	<i>Cassia nictitans</i>
<i>Amaranthus hybridus</i>	<i>Ceanothus americanus</i>
<i>Amaranthus hypocondriacus</i>	<i>Celastrus bullatus</i>
<i>Amaranthus lividus</i>	<i>Celtis occidentalis</i>
<i>Amaryllis atamasca</i>	<i>Cenchrus tribuloides</i>
<i>Ambrosia artemisiifolia</i>	<i>Cercis canadensis</i>
<i>Ambrosia elatior</i>	<i>Chaerophyllum arborescens</i>
<i>Ambrosia trifida</i>	<i>Chelone glabra</i>
<i>Ammannia ramosior</i>	<i>Chelone hirsuta</i>
<i>Anchusa virginiana</i>	<i>Chelone penstemon</i>
<i>Andromeda arborea</i>	<i>Chenopodium virginicum</i>
<i>Andromeda mariana</i>	<i>Chironia angularis</i>
<i>Andromeda paniculata</i>	<i>Chironia dodecandra</i>
<i>Andropogon divaricatum</i>	<i>Chrysogonum virginianum</i>
<i>Anemone quinquefolia</i>	<i>Cicuta bulbifera</i>
<i>Anemone thalictroides</i>	<i>Cicuta maculata</i>
<i>Anemone virginiana</i>	<i>Claytonia virginica</i>
<i>Antirrhinum canadense</i>	<i>Clematis viorna</i>
<i>Apocynum androsaemifolium</i>	<i>Clethra alnifolia</i>
<i>Apocynum cannabinum</i>	<i>Clitoria virginiana</i>
<i>Aquilegia canadensis</i>	<i>Collinsonia canadensis</i>
<i>Aralia spinosa</i>	<i>Commelina erecta</i>
<i>Arethusa bulbosa</i>	<i>Convallaria racemosa</i>
<i>Arethusa ophioglossoides</i>	<i>Convolvulus pandurus</i>
<i>Aristolochia serpentaria</i>	<i>Convolvulus spithameus</i>
<i>Arum virginicum</i>	<i>Coreopsis alternifolia</i>
<i>Asarum virginicum</i>	<i>Coreopsis angustifolia</i>
<i>Asclepias decumbens</i>	<i>Coreopsis auriculata</i>
<i>Asclepias incarnata</i>	<i>Coreopsis tripteris</i>
<i>Asclepias rubra</i>	<i>Coreopsis verticillata</i>
<i>Asclepias syriaca</i>	<i>Cornus florida</i>
<i>Asclepias verticillata</i>	<i>Cracca virginiana</i>
<i>Ascyrum crux-andreae</i>	<i>Crataegus coccinea</i>
<i>Ascyrum hypericoides</i>	<i>Crataegus tomentosa</i>
<i>Ascyrum villosum</i>	<i>Crataegus viridis</i>
<i>Aster concolor</i>	<i>Cucubalus stellatus</i>
<i>Aster divaricatus</i>	<i>Cupressus distichia</i>
<i>Aster novi-belgii</i>	<i>Cuscuta americana</i>
<i>Aster rigidus</i>	<i>Cynoglossum virginianum</i>
<i>Aster tradescantii</i>	<i>Cyperus arundinacea</i>
<i>Aster vernus</i>	<i>Dianthera americana</i>
<i>Astragalus canadensis</i>	<i>Diodia virginiana</i>
<i>Azalea lutea</i>	<i>Dioscorea villosa</i>
<i>Azalea viscosa</i>	<i>Dirca palustris</i>
<i>Baccharis foetida</i>	<i>Dodecatheon meadia</i>
<i>Baccharis halimifolia</i>	<i>Dolichos polystachyus</i>
<i>Bartsia coccinea</i>	<i>Dolichos regularis</i>
<i>Betula lenta</i>	<i>Dracontium foetidum</i>
<i>Betula nigra</i>	<i>Elephantopus tomentosus</i>

<i>Elymus virginicus</i>	<i>Hibiscus virginicus</i>
<i>Epigaea repens</i>	<i>Hieracium gronovii</i>
<i>Erigeron camphoratum</i>	<i>Hieracium venosum</i>
<i>Eriophorum virginicum</i>	<i>Holcus laxus</i>
<i>Eryngium aquaticum</i>	<i>Holcus striatus</i>
<i>Eupatorium aromaticum</i>	<i>Horminum virginicum</i>
<i>Eupatorium coelestinum</i>	<i>Houstonia caerulea</i>
<i>Eupatorium hyssopifolium</i>	<i>Houstonia purpurea</i>
<i>Eupatorium perfoliatum</i>	<i>Hydrangea arborescens</i>
<i>Eupatorium rotundifolium</i>	<i>Hydrophyllum virginianum</i>
<i>Eupatorium scandens</i>	<i>Hyoseris virginica</i>
<i>Eupatorium sessilifolium</i>	<i>Hypericum kalmianum</i>
<i>Eupatorium trifoliatum</i>	<i>Hypericum muticum</i>
<i>Euphorbia corollata</i>	<i>Hypericum setosum</i>
<i>Euphorbia ipecacuanhae</i>	<i>Hysopos nepetoides</i>
<i>Euphorbia polygonifolia</i>	<i>Ipomoea nyctelea</i>
<i>Euonymus americanus</i>	<i>Iris verna</i>
<i>Ferula canadensis</i>	<i>Iris versicolor</i>
<i>Fraxinus americana</i>	<i>Iris virginica</i>
<i>Fumaria cucullaria</i>	<i>Itea virginica</i>
<i>Fumaria sempervirens</i>	<i>Juglans alba</i>
<i>Galax aphylla</i>	<i>Juglans nigra</i>
<i>Galium bermudense</i>	<i>Juniperus virginiana</i>
<i>Gaura biennis</i>	<i>Jussiaea erecta</i>
<i>Gentiana saponaria</i>	<i>Kalmia latifolia</i>
<i>Gentiana villosa</i>	<i>Laurus aestivalis</i>
<i>Geranium carolinianum</i>	<i>Laurus benzoin</i>
<i>Gerardia flava</i>	<i>Laurus borbonia</i>
<i>Gerardia pedicularia</i>	<i>Laurus indica</i>
<i>Gerardia purpurea</i>	<i>Laurus sassafras</i>
<i>Geum virginianum</i>	<i>Leontice thalictroides</i>
<i>Gleditsia triacanthos</i>	<i>Leontodon dandelion</i>
<i>Glycine apios</i>	<i>Linum virginianum</i>
<i>Glycine bracteata</i>	<i>Lithospermum virginianum</i>
<i>Glycine comosa</i>	<i>Lobelia cardinalis</i>
<i>Glycine tomentosa</i>	<i>Lobelia cliffortiana</i>
<i>Gnaphalium obtusifolium</i>	<i>Lobelia inflata</i>
<i>Gnaphalium plantaginifolium</i>	<i>Lobelia siphilitica</i>
<i>Gnaphalium purpureum</i>	<i>Lonicera marilandica</i>
<i>Gratiola dubia</i>	<i>Lonicera symphoricarpos</i>
<i>Gratiola virginiana</i>	<i>Ludwigia alternifolia</i>
<i>Hamamelis virginiana</i>	<i>Lupinus perennis</i>
<i>Hedysarum canadense</i>	<i>Lycopodium alopecuroides</i>
<i>Hedysarum frutescens</i>	<i>Lycopodium apodum</i>
<i>Hedysarum hirtum</i>	<i>Lycopsis virginica</i>
<i>Hedysarum marilandicum</i>	<i>Lycopus virginicus</i>
<i>Hedysarum nudiflorum</i>	<i>Lysimachia ciliata</i>
<i>Hedysarum paniculatum</i>	<i>Lysimachia quadrifolia</i>
<i>Hedysarum repens</i>	<i>Lythrum lineare</i>
<i>Hedysarum violaceum</i>	<i>Lythrum petiolatum</i>
<i>Hedysarum virginicum</i>	<i>Lythrum verticillatum</i>
<i>Hedysarum viridiflorum</i>	<i>Magnolia virginiana</i>
<i>Helianthus angustifolius</i>	var. <i>acuminata</i>
<i>Helianthus atrorubens</i>	var. <i>foetida</i>
<i>Helianthus giganteus</i>	var. <i>glaucia</i>
<i>Helianthus laevis</i>	var. <i>grisea</i>
<i>Helianthus multiflorus</i>	var. <i>tripetala</i>
<i>Heuchera americana</i>	<i>Medeola virginiana</i>
<i>Hibiscus moscheutos</i>	<i>Medicago virginica</i>
<i>Hibiscus palustris</i>	<i>Melanthium virginicum</i>

<i>Melissa pulegioides</i>	<i>Polygala sanguinea</i>
<i>Menispermum canadense</i>	<i>Polygala senega</i>
<i>Menispermum virginicum</i>	<i>Polygala verticillata</i>
<i>Mespilus arbutifolia</i>	<i>Polygala viridescens</i>
<i>Mespilus canadensis</i>	<i>Polygonum arifolium</i>
<i>Mimulus ringens</i>	<i>Polygonum sagittatum</i>
<i>Mitchella repens</i>	<i>Polygonum virginianum</i>
<i>Monarda ciliata</i>	<i>Polypodium virginianum</i>
<i>Monarda clinopodia</i>	<i>Polypodium procumbens</i>
<i>Monarda punctata</i>	<i>Populus heterophylla</i>
<i>Monotropa uniflora</i>	<i>Pontederia cordata</i>
<i>Morus rubra</i>	<i>Prenanthes alba</i>
<i>Myosotis virginiana</i>	<i>Prenanthes altissima</i>
<i>Myrica cerifera</i>	<i>Prinos verticillatus</i>
<i>Napaea dioica</i>	<i>Proserpinaca palustris</i>
<i>Napaea hermaphrodita</i>	<i>Prunus virginiana</i>
<i>Napaea virginica</i>	<i>Ptelea trifoliata</i>
<i>Obalaria virginica</i>	<i>Pteris atropurpurea</i>
<i>Oenothera fruticosa</i>	<i>Pulmonaria virginica</i>
<i>Oldenlandia uniflora</i>	<i>Pyrus coronaria</i>
<i>Onoclea sensibilis</i>	<i>Quercus alba</i>
<i>Ophrys cernua</i>	<i>Quercus rubra</i>
<i>Orchis ciliaris</i>	<i>Queria canadensis</i>
<i>Orchis flava</i>	<i>Ranunculus abortivus</i>
<i>Orchis spectabilis</i>	<i>Rhexia virginica</i>
<i>Ornithogalum bivale</i>	<i>Rhinanthus virginica</i>
<i>Ornithogalum hirsutum</i>	<i>Rhododendron maximum</i>
<i>Orobanche uniflora</i>	<i>Rhus radicans</i>
<i>Orobanche virginiana</i>	<i>Rhus toxicodendron</i>
<i>Orontium aquaticum</i>	<i>Robinia pseudoacacia</i>
<i>Osmunda claytoniana</i>	<i>Rudbeckia hirta</i>
<i>Osteospermum uvedalia</i>	<i>Rudbeckia laciniata</i>
<i>Oxalis longiflora</i>	<i>Rudbeckia oppositifolia</i>
<i>Oxalis stricta</i>	<i>Rudbeckia purpurea</i>
<i>Oxalis violacea</i>	<i>Rudbeckia triloba</i>
<i>Panax quinquefolius</i>	<i>Ruellia strepens</i>
<i>Panax trifolius</i>	<i>Rumex britannica</i>
<i>Panicum dichotomum</i>	<i>Rumex persicarioides</i>
<i>Panicum virgatum</i>	<i>Rumex sanguineus</i>
<i>Parthenium integrifolium</i>	<i>Rumex verticillatus</i>
<i>Penthorum sedoides</i>	<i>Sagina virginica</i>
<i>Phalaris oryzoides</i>	<i>Salvia lyrata</i>
<i>Phlox divaricata</i>	<i>Salvia urticifolia</i>
<i>Phlox glaberrima</i>	<i>Sambucus canadensis</i>
<i>Phlox maculata</i>	<i>Sanicula canadensis</i>
<i>Phlox ovata</i>	<i>Sanicula marilandica</i>
<i>Phlox pilosa</i>	<i>Sarothra gentianoides</i>
<i>Phlox setacea</i>	<i>Satureja origanoides</i>
<i>Phlox subulata</i>	<i>Satureja virginiana</i>
<i>Pinus balsamea</i>	<i>Saururus cernuus</i>
<i>Pinus strobus</i>	<i>Saxifraga pensylvanica</i>
<i>Pinus taeda</i>	<i>Scandix procumbens</i>
<i>Plantago virginica</i>	<i>Schoenus glomeratus</i>
<i>Poa capillaris</i>	<i>Scirpus capitatus</i>
<i>Poa flava</i>	<i>Scirpus retrofractus</i>
<i>Podophyllum peltatum</i>	<i>Scrophularia marilandica</i>
<i>Polemonium dubium</i>	<i>Scutellaria hyssopifolia</i>
<i>Polygala cruciata</i>	<i>Scutellaria integrifolia</i>
<i>Polygala incarnata</i>	<i>Scutellaria lateriflora</i>
<i>Polygala lutea</i>	<i>Senecio aureus</i>

Serratula glauca
Serratula praealta
Serratula scariosa
Serratula squarrosa
Sigesbeckia occidentalis
Silene antirrhina
Silene virginica
Silphium asteriscus
Silphium helianthoides
Silphium solidaginoides
Silphium trifoliatum
Sium rigidius
Smilax herbacea
Smilax lanceolata
Smilax laurifolia
Smilax tamnoides
Smyrnium integrifolium
Solidago canadensis
Sonchus floridanus
Spiraea opulifolia
Spiraea trifoliata
Staphylea trifolia
Stewartia malacodendron
Stipa avenacea
Swertia difformis
Tetragonotheca helianthoides
Teucrium virginicum
Thaspia trifoliata
Thesnius umbellatum
Tilia americana
Tradescantia virginiana
Tragopogon virginicum
Trichostema dichotomum
Trifolium biflorum
Trifolium reflexum
Trillium erectum
Trillium sessile
Triosteum angustifolium
Ulmus americana
Urtica divaricata
Utricularia gibba
Utricularia subulata
Uvularia perfoliata
Vaccinium hispida
Veratrum luteum
Verbena nodiflora
Verbena spuria
Verbena urticifolia
Verbesina virginica
Veronica marilandica
Veronica virginica
Viburnum acerifolium
Viburnum dentatum
Viburnum nudum
Viburnum prunifolium
Viola palmata
Viola pedata
Vitis arborea
Vitis vulpina
Yucca filamentosa

Vascular Plants from Temperate North America Mentioned in Linnaeus' First Edition of Species Plantarum as Occurring only in the New World
Acrostichum polypodioides
Aesculus pavia
Andropogon nutans
Annona muricata
Arum triphyllum
Asclepias nivea
Baccharis ivaefolia
Bignonia crucigera
Buphtalmum frutescens
Caesalpinia brasiliensis
Cassia chamaecrista
Cassia ligustrina
Celastrus myrtifolius
Chenopodium anthelminticum
Crescentia cujete
Crotalaria sagittalis
Cynanchum suberosum
Cyperus strigosus
Eryngium foetidum
Hedysarum canescens
Hypericum lasianthus
Iva frutescens
Laurus winterana
Lepidium virginicum
Liquidambar styraciflua
Lonicera sempervirens
Melothria pendula
Pancratium carolinianum
Panicum capillare
Panicum clandestinum
Passiflora incarnata
Passiflora lutea
Physalis viscosa
Phytolacca americana
Pistacia simaruba
Renealmia usneoides
Sicyos angulata
Sida crispa
Sisyrinchium bermudiana
Smilax pseudo-china
Smilax sarsaparilla
Solanum mammosum
Sophora tinctoria
Tetracera volubilis
Urtica cylindrica
Verbesina alba
Yucca gloriosa

Vascular Plants from Temperate North America Mentioned in Linnaeus' First Edition of Species Plantarum as Occurring in Temperate North America and Elsewhere in the World

<i>Acalypha virginica</i>	<i>Potentilla norvegica</i>
<i>Andromeda calyculata</i>	<i>Prunus lusitanica</i>
<i>Anemone dichotoma</i>	<i>Pyrola rotundifolia</i>
<i>Aralia nudicaulis</i>	<i>Pyrola umbellata</i>
<i>Arbutus uva-ursi</i>	<i>Rhus vernix</i>
<i>Arnica maritima</i>	<i>Ribes nigrum</i>
<i>Asplenium rhizophyllum</i>	<i>Sagittaria sagittifolia</i>
<i>Aster cordifolius</i>	<i>Salicornia virginica</i>
<i>Atriplex laciniata</i>	<i>Samolus valerandii</i>
<i>Bunias cakile</i>	<i>Saxifraga nivalis</i>
<i>Cactus opuntia</i>	<i>Scirpus glomeratus</i>
<i>Carpinus betulus</i>	<i>Serratula noveboracensis</i>
<i>Carpinus ostrya</i>	<i>Silene nocturna</i>
<i>Cassine peragua</i>	<i>Sisymbrium nasturtium-aquaticum</i>
<i>Chelidonium glaucium</i>	<i>Statice armeria</i>
<i>Chrysanthemum arcticum</i>	<i>Statice limonium</i>
<i>Chrysosplenium oppositifolium</i>	<i>Swertia corniculata</i>
<i>Clematis vitalba</i>	<i>Taxus baccata</i>
<i>Clinopodium rugosum</i>	<i>Thuja occidentalis</i>
<i>Clinopodium vulgare</i>	<i>Tiarella cordifolia</i>
<i>Convolvulus hederaceus</i>	<i>Trifolium arvense</i>
<i>Cornus sanguinea</i>	<i>Urtica canadensis</i>
<i>Cynosurus aegyptius</i>	<i>Valeriana cornucopiae</i>
<i>Cypripedium calceolus</i>	<i>Veronica serphilitifolium</i>
<i>Dactylis cynosuroides</i>	<i>Viola primulifolia</i>
<i>Datura stramonium</i>	<i>Xanthium strumarium</i>
<i>Dianthus plumarius</i>	
<i>Drosera rotundifolia</i>	
<i>Erigeron canadense</i>	
<i>Erythronium dens-canis</i>	
<i>Gentiana ciliata</i>	
<i>Geranium maculatum</i>	
<i>Gnaphalium margaritaceum</i>	
<i>Helleborus trifolius</i>	
<i>Hypericum ascyron</i>	
<i>Ilex aquifolium</i>	
<i>Impatiens noli-tangere</i>	
<i>Isnardia palustris</i>	
<i>Juncus bulbosus</i>	
<i>Lilium camschatcense</i>	
<i>Linnaea borealis</i>	
<i>Lycopodium complanatum</i>	
<i>Lycopodium rupestre</i>	
<i>Melica altissima</i>	
<i>Mollugo verticillata</i>	
<i>Monotropa hypopithys</i>	
<i>Nicotiana rustica</i>	
<i>Nymphaea alba</i>	
<i>Nymphaea lotus</i>	
<i>Oenothera biennis</i>	
<i>Ophrys liliifolia</i>	
<i>Origanum vulgare</i>	
<i>Panicum crusgalli</i>	
<i>Panicum sanguinale</i>	
<i>Poa compressa</i>	
<i>Polemonium caeruleum</i>	
<i>Polygonum maritimum</i>	
<i>Polypodium lonchitis</i>	
<i>Polypodium phegopteris</i>	
<i>Portulaca oleracea</i>	
	Vascular Plants from Temperate North America Mentioned in Linnaeus' First Edition of Species Plantarum as Occurring Elsewhere but not Temperate North America
	<i>Agrimonia eupatoria</i>
	<i>Alsine media</i>
	<i>Amaranthus spinosus</i>
	<i>Andropogon hirtum</i>
	<i>Anemone hepatica</i>
	<i>Angelica sylvestris</i>
	<i>Anthericum calyculatum</i>
	<i>Antirrhinum elatine</i>
	<i>Aphanes arvensis</i>
	<i>Arenaria rubra var. marina</i>
	<i>Arundo phragmites</i>
	<i>Atriplex halimus</i>
	<i>Betonica annua</i>
	<i>Bignonia catalpa</i>
	<i>Briza eragrostis</i>
	<i>Callitriches palustris</i>
	<i>Caltha palustris</i>
	<i>Carex pseudocyperus</i>
	<i>Cerastium semidecandrum</i>
	<i>Chenopodium album</i>
	<i>Clinopodium incanum</i>
	<i>Coix lacryma-jobi</i>
	<i>Convallaria polygonatum</i>
	<i>Daucus carota</i>
	<i>Dipsacus fullonum</i>
	<i>Draba verna</i>
	<i>Elatine hydropiper</i>

Elephantopus scaber
Epilobium hirsutum
Equisetum arvense
Equisetum hyemale
Heliotropium indicum
Juncus campestris
Juncus effusus
Juncus filiformis
Lamium amplexicaule
Ligusticum scoticum
Lysimachia punctata
Melissa nepeta
Mentha spicata var. viridis
Nymphaea lutea
Nymphaea nelumbo
Oenothera mollissima
Ophiorrhiza mitreola
Osmunda regalis
Panicum dissectum
Panicum glaucum
Panicum italicum
Physalis pubescens
Polygonum aviculare
Polygonum convolvulus
Polygonum persicaria
Populus nigra
Potamogeton nutans
Potentilla reptans
Ranunculus repens
Rubus caesius
Rubus fruticosus
Rumex acetosella
Salsola kali
Salsola prostrata
Sanicula europaea
Saponaria officinalis
Scandix cerefolium
Scirpus spadiceus
Scrophularia nodosa
Sida abutilon
Sida rhombifolia
Sida spinosa
Solanum nigrum var. vulgare
Sparganium erectum
Spiraea aruncus
Teucrium chamaepitys
Trifolium repens
Veronica anagallis-aquatica
Veronica arvensis
Veronica beccabunga
Vitex agnus-castus
Vitis vinifera
Xyris indica

**Vascular Plants Named for
 Certain Geographical Areas in
 Temperate North America by
 Linnaeus in the First Edition
 of Species Plantarum
 America**

Buchnera americana
Callicarpa americana
Campanula americana
Ceanothus americanus
Cuscuta americana
Dianthera americana
Euonymus americanus
Fraxinus americana
Heuchera americana
Hydrocotyle americana
Phytolacca americana
Schwalbea americana
Tilia americana
Ulmus americana

Canada

Allium canadense
Antirrhinum canadense
Aquilegia canadensis
Arabis canadensis
Asarum canadense
Astragalus canadensis
Cercis canadensis
Circaea lutetiana
 var. *canadensis*
Cistus canadensis
Collinsonia canadensis
Cornus canadensis
Elymus canadensis
Erigeron canadense
Ferula canadensis
Hippophae canadensis
Hypericum canadense
Lactuca canadensis
Lilium canadense
Menispermum canadense
Mentha canadensis
Mespilus canadensis
Ornithogalum canadense
Polymnia canadensis
Potentilla canadensis
Queria canadensis
Rubus canadensis
Sambucus canadensis
Sanguinaria canadensis
Sanguisorba canadensis
Sanicula canadensis
Senecio canadensis
Sison canadense
Solidago canadensis
Sonchus canadensis
Teucrium canadense
Urtica canadensis
Viola canadensis

Carolina

Astragalus carolinianus
Convolvulus carolinus
Geranium carolinianum
Ipomoea carolina

<i>Lycopodium carolinianum</i>	<i>Geum virginianum</i>
<i>Malva caroliniana</i>	<i>Gratiola virginiana</i>
<i>Mensiperium carolinum</i>	<i>Hamamelis virginiana</i>
<i>Pancratium carolinianum</i>	<i>Hedysarum virginicum</i>
<i>Rosa carolina</i>	<i>Hibiscus virginicus</i>
<i>Solanum carolinense</i>	<i>Hydrophyllum virginianum</i>
Florida	<i>Hyoseris virginica</i>
<i>Sonchus floridanus</i>	<i>Iris virginica</i>
Maryland	<i>Itea virginica</i>
<i>Andromeda mariana</i>	<i>Juniperus virginiana</i>
<i>Cassia marilandica</i>	<i>Lepidium virginicum</i>
<i>Clitoria mariana</i>	<i>Linum virginianum</i>
<i>Hedysarum marilandicum</i>	<i>Lithospermum virginianum</i>
<i>Lonicera marilandica</i>	<i>Lycopsis virginica</i>
<i>Rhexia mariana</i>	<i>Lycopus virginicus</i>
<i>Sanicula marilandica</i>	<i>Magnolia virginiana</i>
<i>Scrophularia marilandica</i>	<i>Medeola virginiana</i>
<i>Veronica marilandica</i>	<i>Medicago virginica</i>
New England	<i>Melanthium virginicum</i>
<i>Aster novae-angliae</i>	<i>Menispermum virginicum</i>
New York	<i>Myosotis virginiana</i>
<i>Aster novi-belgii</i>	<i>Nepeta virginica</i>
<i>Polypodium noveboracense</i>	<i>Obolaria virginica</i>
<i>Serratula noveboracensis</i>	<i>Orobanche virginiana</i>
<i>Solidago noveboracensis</i>	<i>Osmunda virginiana</i>
Pennsylvania	<i>Plantago virginica</i>
<i>Acer pensylvanicum</i>	<i>Polygonum virginianum</i>
<i>Avena pensylvanica</i>	<i>Polypodium virginianum</i>
<i>Erigeron philadelphicum</i>	<i>Prunus virginiana</i>
<i>Polygonum pensylvanicum</i>	<i>Pulmonaria virginica</i>
<i>Saxifraga pensylvanica</i>	<i>Rhexia virginica</i>
Virginia	<i>Rhinanthus virginica</i>
<i>Acalypha virginica</i>	<i>Sagina virginica</i>
<i>Agave virginica</i>	<i>Salicornia virginica</i>
<i>Agrostis virginica</i>	<i>Satureja virginiana</i>
<i>Anchusa virginiana</i>	<i>Silene virginica</i>
<i>Andropogon virginicum</i>	<i>Solanum virginianum</i>
<i>Anemone virginiana</i>	<i>Teucrium virginicum</i>
<i>Arum virginicum</i>	<i>Tradescantia virginiana</i>
<i>Asarum virginicum</i>	<i>Tragopogon virginicum</i>
<i>Cardamine virginica</i>	<i>Verbesina virginica</i>
<i>Carduus virginianus</i>	
<i>Chenopodium virginicum</i>	
<i>Chionanthus virginica</i>	
<i>Chrysogonum virginianum</i>	
<i>Claytonia virginica</i>	
<i>Clitoria virginiana</i>	
<i>Cracca virginiana</i>	
<i>Cynoglossum virginianum</i>	
<i>Diodia virginiana</i>	
<i>Diospyros virginiana</i>	
<i>Dracocephalum virginianum</i>	
<i>Elymus virginicus</i>	
<i>Eriophorum virginicum</i>	

Collection Numbers and Species
of Vascular Plants Gathered by
John Clayton and Indirectly
Reported in Linnaeus' First
Edition of Species Plantarum

201	<i>Acalypha virginica</i>
530	<i>Acer negundo</i>
000	<i>Acer rubrum</i>
599	<i>Achnida cannabina</i>
011	<i>Acrostichum areolatum</i>
014	<i>Acrostichum platyneuros</i>
685	<i>Acrostichum polypodioides</i>
305	<i>Actaea racemosa</i>
320	<i>Adiantum pedatum</i>
321	<i>Adiantum pedatum</i>
498	<i>Agave virginica</i>
199	<i>Ageratum altissimum</i>

000	<i>Agrimonia eupatoria</i>	230	<i>Ascyrum hypericoides</i>
000	<i>Agrostis virginica</i>	607	<i>Aster concolor</i>
507	<i>Agrostis virginica</i>	143	<i>Aster divaricatus</i>
074	<i>Aletris farinosa</i>	767	<i>Aster divaricatus</i>
723	<i>Alisma subulata</i>	072	<i>Aster dumosus</i>
529	<i>Alsine media</i>	194	<i>Aster ericoides</i>
442	<i>Amaranthus graecizans</i>	239	<i>Aster grandiflorus</i>
000	<i>Amaranthus lividus</i>	072	<i>Aster linifolius</i>
569	<i>Amaranthus spinosus</i>	244	<i>Aster novae-angliae</i>
256	<i>Amaryllis atamasca</i>	009	<i>Aster rigidus</i>
512	<i>Ambrosia elatior</i>	391	<i>Aster vernus</i>
724	<i>Ambrosia trifida</i>	565	<i>Astragalus canadensis</i>
774	<i>Armannia ramosior</i>	571	<i>Atriplex halimus</i>
304	<i>Anchusa virginiana</i>	000	<i>Atriplex laciniata</i>
000	<i>Andromeda arborea</i>	052	<i>Azalea lutea</i>
000	<i>Andromeda calyculata</i>	032	<i>Azalea viscosa</i>
030	<i>Andromeda mariana</i>	159	<i>Baccharis foetida</i>
073	<i>Andromeda paniculata</i>	240	<i>Baccharis halimifolia</i>
601	<i>Andropogon alopecuroides</i>	293	<i>Bartsia coccinea</i>
070	<i>Andropogon divaricatum</i>	271	<i>Betonica annua</i>
600	<i>Andropogon divaricatum</i>	000	<i>Betula lenta</i>
602	<i>Andropogon hirtum</i>	688	<i>Betula nigra</i>
621	<i>Andropogon nutans</i>	100	<i>Bignonia crucigera</i>
460	<i>Andropogon virginicum</i>	225	<i>Bignonia radicans</i>
606	<i>Andropogon virginicum</i>	582	<i>Briza eragrostis</i>
328	<i>Anemone hepatica</i>	142	<i>Buchnera americana</i>
294	<i>Anemone thalictroides</i>	732	<i>Bunias cakile</i>
529	<i>Anemone virginiana</i>	242	<i>Buphthalmum frutescens</i>
125	<i>Angelica sylvestris</i>	208	<i>Buphthalmum helianthoides</i>
058	<i>Annona muricata</i>	248	<i>Burmannia biflora</i>
269	<i>Anthericum calyculatum</i>	133	<i>Cacalia atriplicifolia</i>
256	<i>Antirrhinum canadense</i>	099	<i>Cactus opuntia</i>
435	<i>Antirrhinum elatine</i>	000	<i>Callicarpa americana</i>
374	<i>Aphanes arvensis</i>	378	<i>Callitricha palustris</i>
438	<i>Apocynum cannabinum</i>	522	<i>Caltha palustris</i>
338	<i>Aquilegia canadensis</i>	020	<i>Campanula perfoliata</i>
400	<i>Arabis canadensis</i>	462	<i>Cardamine virginica</i>
745	<i>Arabis canadensis</i>	193	<i>Carduus virginianus</i>
056	<i>Arabis lyrata</i>	259	<i>Carex pseudocyperus</i>
394	<i>Arabis lyrata</i>	000	<i>Carpinus ostrya</i>
042	<i>Aralia nudicaulis</i>	156	<i>Cassia chamaecrista</i>
233	<i>Aralia spinosa</i>	146	<i>Cassia ligustrina</i>
475	<i>Arenaria rubra</i> var. <i>marina</i>	069	<i>Ceanothus americanus</i>
000	<i>Arethusa bulbosa</i>	311	<i>Ceanothus americanus</i>
472	<i>Arethusa bulbosa</i>	000	<i>Celastrus scandens</i>
635	<i>Arethusa divaricata</i>	576	<i>Celosia paniculata</i>
077	<i>Arethusa ophioglossoides</i>	624	<i>Celtis occidentalis</i>
000	<i>Aristolochia serpentaria</i>	206	<i>Cenchrus tribuloides</i>
066	<i>Arum triphyllum</i>	106	<i>Cephalanthus occidentalis</i>
228	<i>Arum virginicum</i>	342	<i>Cerastium semidecandrum</i>
581	<i>Arundo phragmites</i>	000	<i>Cercis canadensis</i>
288	<i>Asarum canadense</i>	276	<i>Chelidonium glaucium</i>
704	<i>Asarum virginicum</i>	010	<i>Chelone glabra</i>
083	<i>Asclepias decumbens</i>	039	<i>Chelone hirsuta</i>
222	<i>Asclepias incarnata</i>	000	<i>Chenopodium album</i>
065	<i>Asclepias nivea</i>	046	<i>Chionanthus virginica</i>
263	<i>Asclepias rubra</i>	120	<i>Chironia dodecandra</i>
000	<i>Asclepias syriaca</i>	298	<i>Chrysogonum virginianum</i>
216	<i>Asclepias verticillata</i>	215	<i>Cicuta bulbifera</i>
		013	<i>Cicuta maculata</i>

123	<i>Cicuta maculata</i>	439	<i>Eriocaulon decangulare</i>
251	<i>Claytonia virginica</i>	461	<i>Eriophorum virginicum</i>
411	<i>Clematis viorna</i>	500	<i>Eryngium aquaticum</i>
270	<i>Clematis vitalba</i>	282	<i>Eryngium foetidum</i>
112	<i>Clitoria virginiana</i>	691	<i>Erythronium dens-canis</i>
067	<i>Coix lacryma-jobi</i>	603	<i>Eupatorium aromaticum</i>
093	<i>Commelina communis</i>	179	<i>Eupatorium coelestinum</i>
093	<i>Commelina erecta</i>	000	<i>Eupatorium perfoliatum</i>
335	<i>Convallaria polygonatum</i>	162	<i>Eupatorium purpureum</i>
035	<i>Convallaria racemosa</i>	147	<i>Eupatorium scandens</i>
504	<i>Convolvulus hederaceus</i>	620	<i>Eupatorium trifoliatum</i>
641	<i>Convolvulus panduratus</i>	155	<i>Euphorbia corollata</i>
665	<i>Convolvulus repens</i>	000	<i>Euphorbia ipecacuanhae</i>
553	<i>Convolvulus spithameus</i>	152	<i>Euphorbia polygonifolia</i>
667	<i>Coreopsis angustifolia</i>	075	<i>Euonymus americanus</i>
298	<i>Coreopsis auriculata</i>	000	<i>Fagus pumila</i>
308	<i>Coreopsis verticillata</i>	548	<i>Ferula canadensis</i>
057	<i>Cornus florida</i>	000	<i>Fraxinus americana</i>
102	<i>Cracca virginiana</i>	625	<i>Fumaria cucullaria</i>
043	<i>Crataegus coccinea</i>	004	<i>Galax aphylla</i>
000	<i>Crataegus crus-galli</i>	313	<i>Galium bermudense</i>
055	<i>Crataegus tomentosa</i>	010	<i>Gentiana saponaria</i>
526	<i>Crataegus viridis</i>	605	<i>Gentiana villosa</i>
126	<i>Crotalaria sagittalis</i>	372	<i>Geranium carolinianum</i>
245	<i>Cucubalus stellatus</i>	307	<i>Geranium maculatum</i>
384	<i>Cupressus distichia</i>	009	<i>Gerardia flava</i>
215	<i>Cuscuta americana</i>	192	<i>Gerardia pedicularia</i>
001	<i>Cynanchum suberosum</i>	000	<i>Gerardia purpurea</i>
223	<i>Cynanchum suberosum</i>	199	<i>Geum virginianum</i>
257	<i>Cynoglossum virginianum</i>	000	<i>Gleditsia triacanthos</i>
562	<i>Cyperus arundinacea</i>	127	<i>Glycine apios</i>
509	<i>Cyperus odoratus</i>	592	<i>Glycine bracteata</i>
040	<i>Cypripedium calceolus</i>	182	<i>Glycine comosa</i>
577	<i>Dactylis cynosuroides</i>	113	<i>Glycine tomentosa</i>
583	<i>Dactylis cynosuroides</i>	203	<i>Gnaphalium obtusifolium</i>
000	<i>Datura stramonium</i>	287	<i>Gnaphalium plantaginifolia</i>
444	<i>Daucus carota</i>	385	<i>Gnaphalium purpureum</i>
408	<i>Dianthera americana</i>	164	<i>Gratiola dubia</i>
277	<i>Diiodia virginiana</i>	594	<i>Gratiola dubia</i>
094	<i>Dioscorea villosa</i>	379	<i>Gratiola virginiana</i>
080	<i>Diospyros virginiana</i>	544	<i>Hamamelis virginiana</i>
632	<i>Diospyros virginiana</i>	673	<i>Hamamelis virginiana</i>
267	<i>Dipsacus fullonum</i>	116	<i>Hedera quinquefolia</i>
000	<i>Dirca palustris</i>	209	<i>Hedysarum canescens</i>
568	<i>Dolichos polystachyus</i>	174	<i>Hedysarum frutescens</i>
121	<i>Dolichos regularis</i>	510	<i>Hedysarum hirtum</i>
525	<i>Draba verna</i>	516	<i>Hedysarum marilandicum</i>
017	<i>Dracontium foetidum</i>	124	<i>Hedysarum nudiflorum</i>
003	<i>Drosera rotundifolia</i>	184	<i>Hedysarum paniculatum</i>
646	<i>Elatine hydropiper</i>	085	<i>Hedysarum repens</i>
655	<i>Elephantopus scaber</i>	103	<i>Hedysarum violaceum</i>
148	<i>Elephantopus tomentosus</i>	564	<i>Hedysarum virginicum</i>
446	<i>Elymus virginicus</i>	614	<i>Hedysarum virginicum</i>
250	<i>Epigaea repens</i>	190	<i>Hedysarum viridiflorum</i>
586	<i>Epilobium hirsutum</i>	202	<i>Helenium autumnale</i>
341	<i>Equisetum arvense</i>	013	<i>Helianthus angustifolius</i>
657	<i>Equisetum hyemale</i>	136	<i>Helianthus atrorubens</i>
165	<i>Erigeron camphoratum</i>	109	<i>Helianthus giganteus</i>
449	<i>Erigeron canadense</i>	195	<i>Helianthus laevis</i>
234	<i>Eriocaulon decangulare</i>	301	<i>Heuchera americana</i>

424	<i>Heuchera americana</i>	185	<i>Lycopus virginicus</i>
122	<i>Hibiscus moscheutos</i>	433	<i>Lysimachia punctata</i>
567	<i>Hibiscus virginicus</i>	419	<i>Lysimachia quadrifolia</i>
447	<i>Hieracium gronovii</i>	505	<i>Lythrum lineare</i>
386	<i>Hieracium venosum</i>	418	<i>Lythrum petiolatum</i>
589	<i>Holcus laxus</i>	214	<i>Lythrum verticillatum</i>
590	<i>Holcus striatus</i>	034	<i>Magnolia virginiana</i>
060	<i>Houstonia caerulea</i>	404	<i>Magnolia virginiana</i>
063	<i>Houstonia purpurea</i>		var. <i>acuminata</i>
079	<i>Hydrangea arborescens</i>	024	<i>Magnolia virginiana</i>
429	<i>Hydrocotyle umbellata</i>		var. <i>foetida</i>
249	<i>Hydrophyllum virginianum</i>	022	<i>Medeola virginiana</i>
376	<i>Hyoseris virginica</i>	191	<i>Medicago virginica</i>
552	<i>Hypericum canadense</i>	422	<i>Melanthium virginicum</i>
232	<i>Hypericum muticum</i>	198	<i>Melissa nepeta</i>
135	<i>Hypericum setosum</i>	514	<i>Melissa pulegioides</i>
168	<i>Hyssopus nepetoides</i>	134	<i>Melothria pendula</i>
000	<i>Ilex aquifolium</i>	546	<i>Menispermum canadense</i>
253	<i>Iris verna</i>	425	<i>Menispermum virginicum</i>
259	<i>Iris virginica</i>	654	<i>Mentha spicata</i> var. <i>viridis</i>
480	<i>Itea virginica</i>	060	<i>Mespilus canadensis</i>
556	<i>Itea virginica</i>	295	<i>Mespilus canadensis</i>
243	<i>Iva frutescens</i>	130	<i>Mimulus ringens</i>
000	<i>Juglans alba</i>	028	<i>Mitchella repens</i>
000	<i>Juglans nigra</i>	399	<i>Mollugo verticillata</i>
340	<i>Juncus bulbosus</i>	412	<i>Monarda ciliata</i>
332	<i>Juncus campestris</i>	212	<i>Monarda clinopodia</i>
393	<i>Juncus effusus</i>	140	<i>Monarda punctata</i>
580	<i>Juncus filiformis</i>	245	<i>Monotropa uniflora</i>
884	<i>Juniperus virginiana</i>	111	<i>Myosotis virginiana</i>
021	<i>Kalmia angustifolia</i>	684	<i>Myrica asplenifolia</i>
331	<i>Lamium amplexicaule</i>	719	<i>Myrica asplenifolia</i>
000	<i>Laurus aestivalis</i>	000	<i>Myrica cerifera</i>
520	<i>Laurus aestivalis</i>	437	<i>Nepeta virginica</i>
054	<i>Laurus benzoin</i>	000	<i>Nyssa aquatica</i>
000	<i>Laurus borbonia</i>	049	<i>Nyssa aquatica</i>
485	<i>Laurus indica</i>	286	<i>Obolaria virginica</i>
056	<i>Laurus sassafras</i>	000	<i>Oenothera biennis</i>
610	<i>Lechea minor</i>	036	<i>Oenothera fruticosa</i>
545	<i>Leontice thalictroides</i>	333	<i>Oenothera fruticosa</i>
019	<i>Leontodon dandelion</i>	200	<i>Oenothera mollissima</i>
383	<i>Leontodon dandelion</i>	587	<i>Oldenlandia uniflora</i>
000	<i>Lepidium virginicum</i>	674	<i>Onoclea sensibilis</i>
307	<i>Ligusticum scoticum</i>	714	<i>Onoclea sensibilis</i>
076	<i>Limodorum tuberosum</i>	187	<i>Ophiorrhiza mitreola</i>
440	<i>Linum virginianum</i>	658	<i>Ophrys liliifolia</i>
000	<i>Liquidambar styraciflua</i>	708	<i>Ophrys liliifolia</i>
487	<i>Liquidambar styraciflua</i>	560	<i>Orchis ciliaris</i>
531	<i>Liquidambar styraciflua</i>	639	<i>Orchis flava</i>
016	<i>Liriodendron tulipifera</i>	668	<i>Orchis pyccodes</i>
647	<i>Lithospermum virginianum</i>	260	<i>Orchis spectabilis</i>
005	<i>Lobelia cardinalis</i>	310	<i>Origanum vulgare</i>
196	<i>Lobelia cliffortiana</i>	044	<i>Ornithogalum bivale</i>
000	<i>Lonicera marilandica</i>	000	<i>Ornithogalum hirsutum</i>
201	<i>Lonicera symphoricarpos</i>	387	<i>Orobanche uniflora</i>
281	<i>Lonicera symphoricarpos</i>	604	<i>Orobanche virginiana</i>
137	<i>Ludwigia alternifolia</i>	053	<i>Orontium aquaticum</i>
000	<i>Lupinus perennis</i>	000	<i>Osmunda claytoniana</i>
027	<i>Lycopodium alopecuroides</i>	011	<i>Osmunda regalis</i>
000	<i>Lycopsis virginica</i>	008	<i>Osmunda virginiana</i>

138	Osteospermum uvedalia	339	Pulmonaria virginica
221	Osteospermum uvedalia	088	Pyrola maculata
741	Oxalis longiflora	000	Pyrus coronaria
474	Oxalis stricta	000	Quercus alba
000	Oxalis violacea	467	Quercus alba
000	Panax quinquefolius	000	Quercus nigra
329	Panax trifolius	000	Quercus phellos
454	Panicum capillare	000	Quercus prinus
458	Panicum dichotomum	000	Quercus rubra
579	Panicum glaucum	316	Queria canadensis
591	Panicum italicum	317	Queria canadensis
457	Panicum sanguinale	701	Ranunculus abortivus
578	Panicum virgatum	473	Ranunculus repens
606	Panicum virgatum	710	Ranunculus repens
263	Parthenium integrifolium	389	Renealmia usneoides
151	Passiflora incarnata	227	Rhexia virginica
118	Passiflora lutea	488	Rhinanthus virginica
158	Penthorum sedoides	728	Rhus copallina
595	Phalaris oryzoides	492	Rhus glabra
297	Phlox glaberrima	238	Rhus radicans
129	Phryma leptostachya	000	Rhus toxicodendron
128	Physalis viscosa	479	Rhus toxicodendron
671	Phytolacca americana	681	Rhus vernix
547	Pinus balsamea	050	Robinia pseudoacacia
496	Pinus taeda	634	Rubus caesius
343	Plantago virginica	703	Rubus fruticosus
000	Platanus occidentalis	490	Rudbeckia hirta
471	Platanus occidentalis	539	Rudbeckia laciniata
580	Poa capillaris	609	Rudbeckia oppositifolia
581	Poa capillaris	417	Rudbeckia purpurea
273	Poa flava	490	Rudbeckia purpurea
255	Podophyllum peltatum	657	Rudbeckia triloba
249	Polemonium caeruleum	085	Ruellia strepens
556	Polemonium dubium	098	Ruellia strepens
157	Polygala cruciata	494	Rumex acetosella
414	Polygala senega	000	Rumex britannica
563	Polygala verticillata	000	Rumex verticillatus
000	Polygala viridescens	649	Sagina virginica
382	Polygonum aviculare	278	Sagittaria sagittifolia
000	Polygonum convolvulus	527	Salicornia virginica
670	Polygonum persicaria	667	Salicornia virginica
672	Polygonum persicaria	432	Salsola kali
000	Polygonum sagittatum	019	Salvia lyrata
000	Polygonum scandens	391	Salvia lyrata
183	Polygonum virginianum	292	Salvia urticifolia
322	Polypodium lonchitis	314	Samolus valerandii
768	Polypodium procumbens	247	Sanguinaria canadensis
087	Pontederia cordata	000	Sanicula canadensis
532	Populus heterophylla	000	Sanicula europaea
679	Populus nigra	028	Sanicula marilandica
410	Portulaca oleracea	660	Saponaria officinalis
664	Potamogeton nutans	110	Sarothra gentianoides
699	Potentilla reptans	559	Sarracenia flava
015	Prenanthes alba	717	Sarracenia purpurea
284	Prenanthes alba	197	Satureja organoides
319	Prenanthes alba	141	Satureja virginiana
078	Prinos verticillatus	107	Saururus cernuus
000	Prunus virginiana	525	Saxifraga nivalis
627	Prunus virginiana	304	Saxifraga pensylvanica
682	Pteris atropurpurea	407	Scandix cerefolium

407	Scandix procumbens	135	Teucrium canadense
033	Schwalbea americana	443	Teucrium chamaepeitys
585	Schoenus glomeratus	117	Teucrium virginicum
380	Scirpus capitatus	291	Thapsia trifoliata
570	Scirpus glomeratus	554	Tiarella cordifolia
457	Scirpus retrofractus	000	Tilia americana
456	Scirpus spadiceus	297	Tradescantia virginiana
220	Scrophularia marilandica	309	Tragopogon virginicum
000	Scrophularia nodosa	177	Trichostema dichotomum
261	Scutellaria hyssopifolia	092	Trifolium biflorum
105	Scutellaria integrifolia	289	Trifolium reflexum
280	Scutellaria lateriflora	390	Trifolium repens
249	Senecio aureus	000	Trillium sessile
286	Senecio aureus	626	Triosteum angustifolium
015	Serratula glauca	524	Ulmus americana
175	Serratula glauca	000	Uniola paniculata
000	Serratula scariosa	508	Urtica cylindrica
651	Serratula scariosa	246	Urtica pumila
237	Serratula spicata	515	Utricularia gibba
014	Serratula squarrosa	517	Utricularia gibba
441	Sida abutilon	031	Utricularia subulata
131	Sida rhombifolia	258	Uvularia perfoliata
511	Sigesbeckia occidentalis	537	Vaccinium frondosum
388	Silene antirrhina	042	Vaccinium stamineum
423	Silene virginica	043	Valeriana locusta
187	Silphium asteriscus	var. radiata	
610	Silphium helianthoides	299	Veratrum luteum
721	Sison canadense	448	Verbena nodiflora
528	Sisymbrium nasturtium-aquaticum	000	Verbena spuria
018	Sisyrinchium bermudiana	431	Verbena urticifolia
279	Sium rigidus	163	Verbesina alba
541	Smilax herbacea	166	Verbesina virginica
082	Smilax lanceolata	161	Veronica anagallis-aquatica
617	Smilax laurifolia	368	Veronica arvensis
082	Smilax pseudo-china	161	Veronica beccabunga
541	Smilax pseudo-china	226	Veronica marilandica
561	Smilax pseudo-china	367	Veronica serpyllifolia
630	Smilax pseudo-china	428	Veronica virginica
081	Smilax sarsaparilla	543	Viburnum acerifolium
464	Smyrnium aureum	064	Viburnum nudum
549	Smyrnium integrifolium	047	Viburnum prunifolium
430	Solanum nigrum	793	Viola palmata
	var. vulgare	254	Viola pedata
283	Solidago canadensis	470	Viola primulifolia
283	Solidago sempervirens	506	Vitex agnus-castus
733	Solidago sempervirens	696	Vitis vinifera
139	Sonchus canadensis	502	Xanthium strumarium
071	Sophora tinctoria	219	Xyris indica
434	Sparganium erectum	270	Yucca filamentosa
302	Spiraea aruncus	574	Zizania aquatica
421	Spiraea aruncus		
302	Spiraea opulifolia		
290	Spiraea trifoliata		
000	Staphylea trifolia		
573	Statice limonium		
621	Stipa avenacea		
171	Swertia difformis		
097	Tetragonotheca helianthoides		

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of Vascular Plants Gathered by
John Clayton and Indirectly
Reported in Linnaeus' First
Edition of Species Plantarum

000 *Acer rubrum*
000 *Agrimonia eupatoria*

000 <i>Agrostis virginica</i>	000 <i>Tilia americana</i>
000 <i>Amaranthus lividus</i>	000 <i>Trillium sessile</i>
000 <i>Andromeda arborea</i>	000 <i>Uniola paniculata</i>
000 <i>Andromeda calyculata</i>	000 <i>Verbena spuria</i>
000 <i>Arethusa bulbosa</i>	001 <i>Cynanchus suberosum</i>
000 <i>Aristolochia serpentaria</i>	003 <i>Drosera rotundifolia</i>
000 <i>Asclepias syriaca</i>	004 <i>Galax aphylla</i>
000 <i>Atriplex laciniata</i>	005 <i>Lobelia cardinalis</i>
000 <i>Betula lenta</i>	008 <i>Osmunda virginiana</i>
000 <i>Callicarpa americana</i>	009 <i>Aster rigidus</i>
000 <i>Carpinus ostrya</i>	009 <i>Gerardia flava</i>
000 <i>Celastrus scandens</i>	010 <i>Chelone glabra</i>
000 <i>Cercis canadensis</i>	010 <i>Gentiana saponaria</i>
000 <i>Chenopodium album</i>	011 <i>Acrostichum areolatum</i>
000 <i>Crataegus crus-galli</i>	011 <i>Osmunda regalis</i>
000 <i>Datura stramonium</i>	013 <i>Cicuta maculata</i>
000 <i>Dirca palustris</i>	013 <i>Helianthus angustifolius</i>
000 <i>Eupatorium perfoliatum</i>	014 <i>Acrostichum platyneuros</i>
000 <i>Euphorbia ipecacuanhae</i>	014 <i>Serratula squarrosa</i>
000 <i>Fagus pumila</i>	015 <i>Prenanthes alba</i>
000 <i>Fraxinus americana</i>	015 <i>Serratula glauca</i>
000 <i>Gerardia purpurea</i>	016 <i>Liriodendron tulipifera</i>
000 <i>Gleditsia triacanthos</i>	017 <i>Dracontium foetidum</i>
000 <i>Ilex aquifolium</i>	018 <i>Sisyrinchium bermudiana</i>
000 <i>Juglans alba</i>	019 <i>Leontodon dandelion</i>
000 <i>Juglans nigra</i>	019 <i>Salvia lyrata</i>
000 <i>Laurus aestivalis</i>	020 <i>Campanula perfoliata</i>
000 <i>Laurus borbonia</i>	021 <i>Kalmia angustifolia</i>
000 <i>Lepidium virginicum</i>	022 <i>Mediola virginiana</i>
000 <i>Liquidambar styraciflua</i>	024 <i>Magnolia virginiana</i> var. <i>foetida</i>
000 <i>Lonicera marilandica</i>	027 <i>Lycopodium alopecuroides</i>
000 <i>Lupinus perennis</i>	028 <i>Mitchella repens</i>
000 <i>Lycopsis virginica</i>	028 <i>Sanicula marilandica</i>
000 <i>Myrica cerifera</i>	030 <i>Andromeda mariana</i>
000 <i>Nyssa aquatica</i>	031 <i>Utricularia subulata</i>
000 <i>Oenothera biennis</i>	032 <i>Azalea viscosa</i>
000 <i>Ornithogalum hirsutum</i>	033 <i>Schwalbea americana</i>
000 <i>Osmunda claytoniana</i>	034 <i>Magnolia virginiana</i>
000 <i>Oxalis violacea</i>	035 <i>Convallaria racemosa</i>
000 <i>Panax quinquefolius</i>	036 <i>Oenothera fruticosa</i>
000 <i>Platanus occidentalis</i>	039 <i>Chelone hirsuta</i>
000 <i>Polygala viridescens</i>	040 <i>Cypripedium calceolus</i>
000 <i>Polygonum convolvulus</i>	042 <i>Aralia nudicaulis</i>
000 <i>Polygonum sagittatum</i>	042 <i>Vaccinium stamineum</i>
000 <i>Polygonum scandens</i>	043 <i>Crataegus coccinea</i>
000 <i>Prunus virginiana</i>	043 <i>Valeriana locusta</i> var. <i>radiata</i>
000 <i>Pyrus coronaria</i>	044 <i>Ornithogalum bivale</i>
000 <i>Quercus alba</i>	046 <i>Chionanthus virginica</i>
000 <i>Quercus nigra</i>	047 <i>Viburnum prunifolium</i>
000 <i>Quercus phellos</i>	049 <i>Nyssa aquatica</i>
000 <i>Quercus prinus</i>	050 <i>Robinia pseudoacacia</i>
000 <i>Quercus rubra</i>	052 <i>Azalea lutea</i>
000 <i>Rhus toxicodendron</i>	053 <i>Orontium aquaticum</i>
000 <i>Rumex britannica</i>	054 <i>Laurus benzoin</i>
000 <i>Rumex verticillatus</i>	055 <i>Crataegus tomentosa</i>
000 <i>Sanicula canadensis</i>	056 <i>Arabis lyrata</i>
000 <i>Sanicula europaea</i>	056 <i>Laurus sassafras</i>
000 <i>Scrophularia nodosa</i>	058 <i>Annona muricata</i>
000 <i>Serratula scariosa</i>	
000 <i>Staphylea trifolia</i>	

060 *Houstonia caerulea*
 060 *Mespilus canadensis*
 063 *Houstonia purpurea*
 064 *Viburnum nudum*
 065 *Asclepias nivea*
 066 *Arum triphyllum*
 067 *Coix lacryma-jobi*
 069 *Ceanothus americanus*
 070 *Andropogon divaricatum*
 071 *Sophora tinctoria*
 072 *Aster dumosus*
 072 *Aster linifolius*
 073 *Andromeda paniculata*
 074 *Aletris farinosa*
 075 *Euonymus americanus*
 076 *Limodorum tuberosum*
 077 *Arethusa ophioglossoides*
 078 *Prinos verticillatus*
 079 *Hydrangea arborescens*
 080 *Diospyros virginiana*
 081 *Smilax sarsaparilla*
 082 *Smilax lanceolata*
 082 *Smilax pseudo-china*
 083 *Asclepias decumbens*
 085 *Hedysarum repens*
 085 *Ruellia strepens*
 087 *Pontederia cordata*
 088 *Pyrola maculata*
 092 *Trifolium biflorum*
 093 *Commelina communis*
 093 *Commelina erecta*
 094 *Dioscorea villosa*
 097 *Tetragonotheca helianthoides*
 098 *Ruellia strepens*
 099 *Cactus opuntia*
 100 *Bignonia crucigera*
 102 *Cracca virginiana*
 103 *Hedysarum violaceum*
 105 *Scutellaria integrifolia*
 106 *Cephalanthus occidentalis*
 107 *Saururus cernuus*
 109 *Helianthus giganteus*
 110 *Sarothra gentianoides*
 111 *Myosotis virginiana*
 112 *Clitoria virginiana*
 113 *Glycine tomentosa*
 116 *Hedera quinquefolia*
 117 *Teucrium virginicum*
 118 *Passiflora lutea*
 120 *Chironia dodecandra*
 121 *Dolichos regularis*
 122 *Hibiscus moscheutos*
 123 *Cicuta maculata*
 124 *Hedysarum nudiflorum*
 125 *Angelica sylvestris*
 126 *Crotalaria sagittalis*
 127 *Glycine apios*
 128 *Physalis viscosa*
 129 *Phryma leptostachya*
 130 *Mimulus ringens*
 131 *Sida rhombifolia*
 133 *Cacalia atriplicifolia*
 134 *Melothria pendula*
 135 *Hypericum setosum*
 135 *Teucrium canadense*
 136 *Helianthus atrorubens*
 137 *Ludwigia alternifolia*
 138 *Osteospermum uvedalia*
 139 *Sonchus canadensis*
 140 *Monarda punctata*
 141 *Satureja virginiana*
 142 *Buchnera americana*
 143 *Aster divaricatus*
 146 *Cassia ligustrina*
 147 *Eupatorium scandens*
 148 *Elephantopus tomentosus*
 151 *Passiflora incarnata*
 152 *Euphorbia polygonifolia*
 155 *Euphorbia corollata*
 156 *Cassia chamaecrista*
 157 *Polygala cruciata*
 158 *Penthorum sedoides*
 159 *Baccharis foetida*
 161 *Veronica anagallis-aquatica*
 161 *Veronica beccabunga*
 162 *Eupatorium purpureum*
 163 *Verbesina alba*
 164 *Gratiola dubia*
 165 *Erigeron camphoratum*
 166 *Verbesina virginica*
 168 *Hyssopus nepetoides*
 171 *Swertia difformis*
 174 *Hedysarum frutescens*
 175 *Serratula glauca*
 177 *Trichostema dichotomum*
 179 *Eupatorium coelestinum*
 182 *Glycine comosa*
 183 *Polygonum virginianum*
 184 *Hedysarum paniculatum*
 185 *Lycopus virginicus*
 187 *Ophiorrhiza mitreola*
 187 *Silphium asteriscus*
 190 *Hedysarum viridiflorum*
 191 *Medicago virginica*
 192 *Gerardia pedicularia*
 193 *Carduus virginianus*
 194 *Aster ericoides*
 195 *Helianthus laevis*
 196 *Lobelia cliffortiana*
 197 *Satureja origanoides*
 198 *Melissa nepeta*
 199 *Ageratum altissimum*
 199 *Geum virginianum*
 200 *Oenothera mollissima*
 201 *Acalypha virginica*
 201 *Lonicera symphoricarpos*
 202 *Helenium autumnale*
 203 *Gnaphalium obtusifolium*

206	<i>Cenchrus tribuloides</i>	279	<i>Sium rigidius</i>
208	<i>Buphthalmum helianthoides</i>	280	<i>Scutellaria lateriflora</i>
209	<i>Hedysarum canescens</i>	281	<i>Lonicera symphoricarpos</i>
212	<i>Monarda clinopodia</i>	282	<i>Eryngium foetidum</i>
214	<i>Lythrum verticillatum</i>	283	<i>Solidago canadensis</i>
215	<i>Cicuta bulbifera</i>	283	<i>Solidago sempervirens</i>
215	<i>Cuscuta americana</i>	284	<i>Prenanthes alba</i>
216	<i>Asclepias verticillata</i>	286	<i>Obolaria virginica</i>
219	<i>Xyris indica</i>	286	<i>Senecio aureus</i>
220	<i>Scrophularia marilandica</i>	287	<i>Gnaphalium plantaginifolia</i>
221	<i>Osteospermum uvedalia</i>	288	<i>Asarum canadense</i>
222	<i>Asclepias incarnata</i>	289	<i>Trifolium reflexum</i>
223	<i>Cynanchum suberosum</i>	290	<i>Spiraea trifoliata</i>
225	<i>Bignonia radicans</i>	291	<i>Thapsia trifoliata</i>
226	<i>Veronica marilandica</i>	292	<i>Salvia urticifolia</i>
227	<i>Rhexia virginica</i>	293	<i>Bartsia coccinea</i>
228	<i>Arum virginicum</i>	294	<i>Anemone thalictroides</i>
230	<i>Ascyrum hypericoides</i>	295	<i>Mespileus canadensis</i>
232	<i>Hypericum mutilum</i>	297	<i>Phlox glaberrima</i>
233	<i>Aralia spinosa</i>	297	<i>Tradescantia virginiana</i>
234	<i>Eriocaulon decangulare</i>	298	<i>Chrysogonum virginianum</i>
237	<i>Serratula spicata</i>	298	<i>Coreopsis auriculata</i>
238	<i>Rhus radicans</i>	299	<i>Veratrum luteum</i>
239	<i>Aster grandiflorus</i>	301	<i>Heuchera americana</i>
240	<i>Baccharis halimifolia</i>	302	<i>Spiraea aruncus</i>
242	<i>Buphthalmum frutescens</i>	302	<i>Spiraea opulifolia</i>
243	<i>Iva frutescens</i>	304	<i>Anchusa virginiana</i>
244	<i>Aster novae-angliae</i>	304	<i>Saxifraga pensylvanica</i>
245	<i>Cucubalus stellatus</i>	305	<i>Actaea racemosa</i>
245	<i>Monotropa uniflora</i>	307	<i>Geranium maculatum</i>
246	<i>Urtica pumila</i>	307	<i>Ligusticum scoticum</i>
247	<i>Sanguinaria canadensis</i>	308	<i>Coreopsis verticillata</i>
248	<i>Burmannia biflora</i>	309	<i>Tragopogon virginicum</i>
249	<i>Hydrophyllum virginianum</i>	310	<i>Origanum vulgare</i>
249	<i>Polemonium caeruleum</i>	311	<i>Ceanothus americanus</i>
249	<i>Senecio aureus</i>	313	<i>Galium bermudense</i>
250	<i>Epigaea repens</i>	314	<i>Samolus valerandii</i>
251	<i>Claytonia virginica</i>	316	<i>Queria canadensis</i>
253	<i>Iris verna</i>	317	<i>Queria canadensis</i>
254	<i>Viola pedata</i>	319	<i>Prenanthes alba</i>
255	<i>Podophyllum peltatum</i>	320	<i>Adiantum pedatum</i>
256	<i>Amaryllis atamasca</i>	321	<i>Adiantum pedatum</i>
256	<i>Antirrhinum canadense</i>	322	<i>Polypodium lonchitis</i>
257	<i>Cynoglossum virginianum</i>	328	<i>Anemone hepatica</i>
258	<i>Uvularia perfoliata</i>	329	<i>Panax trifolius</i>
259	<i>Carex pseudocyperus</i>	331	<i>Lamium amplexicaule</i>
259	<i>Iris virginica</i>	332	<i>Juncus campestris</i>
260	<i>Orchis spectabilis</i>	333	<i>Oenothera fruticosa</i>
261	<i>Scutellaria hyssopifolia</i>	335	<i>Convallaria polygonatum</i>
263	<i>Asclepias rubra</i>	338	<i>Aquilegia canadensis</i>
263	<i>Parthenium integrifolium</i>	339	<i>Pulmonaria virginica</i>
267	<i>Dipsacus fullonum</i>	340	<i>Juncus bulbosus</i>
269	<i>Anthericum calyculatum</i>	341	<i>Equisetum arvense</i>
270	<i>Clematis vitalba</i>	342	<i>Cerastium semidecandrum</i>
270	<i>Yucca filamentosa</i>	343	<i>Plantago virginica</i>
271	<i>Betonica annua</i>	367	<i>Veronica serpyllifolia</i>
273	<i>Poa flava</i>	368	<i>Veronica arvensis</i>
276	<i>Chelidonium glaucium</i>	372	<i>Geranium carolinianum</i>
277	<i>Diodia virginiana</i>	374	<i>Aphanes arvensis</i>
278	<i>Sagittaria sagittifolia</i>	376	<i>Hyoseris virginica</i>

378 *Callitricha palustris*
 379 *Gratiola virginiana*
 380 *Scirpus capitatus*
 382 *Polygonum aviculare*
 383 *Leontodon dandelion*
 384 *Cupressus distichia*
 385 *Gnaphalium purpureum*
 386 *Hieracium venosum*
 387 *Orobanche uniflora*
 388 *Silene antirrhina*
 389 *Renealmia usneoides*
 390 *Trifolium repens*
 391 *Aster vernus*
 391 *Salvia lyrata*
 393 *Juncus effusus*
 394 *Arabis lyrata*
 399 *Mollugo verticillata*
 400 *Arabis canadensis*
 404 *Magnolia virginiana*
 var. *acuminata*
 407 *Scandix cerefolium*
 407 *Scandix procumbens*
 408 *Dianthera americana*
 410 *Portulaca oleracea*
 411 *Clematis viorna*
 412 *Monarda ciliata*
 414 *Polygala senega*
 417 *Rudbeckia purpurea*
 418 *Lythrum petiolatum*
 419 *Lysimachia quadrifolia*
 421 *Spiraea aruncus*
 422 *Melanthium virginicum*
 423 *Silene virginica*
 424 *Heuchera americana*
 425 *Menispermum virginicum*
 428 *Veronica virginica*
 429 *Hydrocotyle umbellata*
 430 *Solanum nigrum*
 var. *vulgare*
 431 *Verbena urticifolia*
 432 *Salsola kali*
 433 *Lysimachia punctata*
 434 *Sparganium erectum*
 435 *Antirrhinum elatine*
 437 *Neptea virginica*
 438 *Apocynum cannabinum*
 439 *Eriocalon decangulare*
 440 *Linum virginianum*
 441 *Sida abutilon*
 442 *Amaranthus graecizans*
 443 *Teucrium chamaepitys*
 444 *Daucus carota*
 446 *Elymus virginicus*
 447 *Hieracium gronovii*
 448 *Verbena nodiflora*
 449 *Erigeron canadense*
 454 *Panicum capillare*
 456 *Scirpus spadiceus*
 457 *Panicum sanguinale*
 457 *Scirpus retrofractus*
 458 *Panicum dichotomum*
 460 *Andropogon virginicum*
 461 *Eriophorum virginicum*
 462 *Cardamine virginica*
 464 *Smyrnium aureum*
 467 *Quercus alba*
 470 *Viola primulifolia*
 471 *Platanus occidentalis*
 472 *Arethusa bulbosa*
 473 *Ranunculus repens*
 474 *Oxalis stricta*
 475 *Arenaria rubra*
 var. *marina*
 479 *Rhus toxicodendron*
 480 *Itea virginica*
 485 *Laurus indica*
 487 *Liquidambar styraciflua*
 488 *Rhianthus virginica*
 490 *Rudbeckia hirta*
 490 *Rudbeckia purpurea*
 492 *Rhus glabra*
 494 *Rumex acetosella*
 496 *Pinus taeda*
 498 *Agave virginica*
 500 *Eryngium aquaticum*
 502 *Xanthium strumarium*
 504 *Convolvulus hederaceus*
 505 *Lythrum lineare*
 506 *Vitex agnus-castus*
 507 *Agrostis virginica*
 508 *Urtica cylindrica*
 509 *Cyperus odoratus*
 510 *Hedysarum hirtum*
 511 *Sigesbeckia occidentalis*
 512 *Ambrosia elatior*
 514 *Melissa pulegioides*
 515 *Utricularia gibba*
 516 *Hedysarum marilandicum*
 517 *Utricularia gibba*
 520 *Laurus aestivalis*
 522 *Caltha palustris*
 524 *Ulmus americana*
 525 *Draba verna*
 525 *Saxifraga nivalis*
 526 *Crataegus viridis*
 527 *Salicornia virginica*
 528 *Sisymbrium nasturtium-aquaticum*
 529 *Alsine media*
 529 *Anemone virginiana*
 530 *Acer negundo*
 531 *Liquidambar styraciflua*
 532 *Populus heterophylla*
 537 *Vaccinium frondosum*
 539 *Rudbeckia laciniata*
 541 *Smilax herbacea*
 541 *Smilax pseudo-china*
 543 *Viburnum acerifolium*
 544 *Hamamelis virginiana*
 545 *Leontice thalictroides*

546 *Menispermum canadense*
 547 *Pinus balsamea*
 548 *Ferula canadensis*
 549 *Smyrnium integrerrimum*
 552 *Hypericum canadense*
 553 *Convolvulus spithameus*
 554 *Tiarella cordifolia*
 556 *Itea virginica*
 556 *Polemonium dubium*
 559 *Sarracenia flava*
 560 *Orchis ciliaris*
 561 *Smilax pseudo-china*
 562 *Cyperus arundinacea*
 563 *Polygala verticillata*
 564 *Hedysarum virginicum*
 565 *Astragalus canadensis*
 567 *Hibiscus virginicus*
 568 *Dolichos polystachyus*
 569 *Amaranthus spinosus*
 570 *Scirpus glomeratus*
 571 *Atriplex halimus*
 573 *Statice limonium*
 574 *Zizania aquatica*
 576 *Celosia paniculata*
 577 *Dactylis cynosuroides*
 578 *Panicum virgatum*
 579 *Panicum glaucum*
 580 *Juncus filiformis*
 580 *Poa capillaris*
 581 *Arundo phragmites*
 581 *Poa capillaris*
 582 *Briza eragrostis*
 583 *Dactylis cynosuroides*
 585 *Schoenus glomeratus*
 586 *Epilobium hirsutum*
 587 *Oldenlandia uniflora*
 589 *Holcus laxus*
 590 *Holcus striatus*
 591 *Panicum italicum*
 592 *Glycine bracteata*
 594 *Gratiola dubia*
 595 *Phalaris oryzoides*
 599 *Acnida cannabina*
 600 *Andropogon divaricatum*
 601 *Andropogon alopecuroides*
 602 *Andropogon hirtum*
 603 *Eupatorium aromaticum*
 604 *Orobanche virginiana*
 605 *Gentiana villosa*
 606 *Andropogon virginicum*
 606 *Panicum virgatum*
 607 *Aster concolor*
 609 *Rudbeckia oppositifolia*
 610 *Lechea minor*
 610 *Silphium helianthoides*
 614 *Hedysarum virginicum*
 617 *Smilax laurifolia*
 620 *Eupatorium trifoliatum*
 621 *Andropogon nutans*
 621 *Stipa avenacea*
 624 *Celtis occidentalis*
 625 *Fumaria cucullaria*
 626 *Triosteum angustifolium*
 627 *Prunus virginiana*
 630 *Smilax pseudo-china*
 632 *Diospyros virginiana*
 634 *Rubus caesius*
 635 *Arethusa divaricata*
 639 *Orchis flava*
 641 *Convolvulus panduratus*
 646 *Elatine hydropiper*
 647 *Lithospermum virginianum*
 649 *Sagina virginica*
 651 *Serratula squarrosa*
 654 *Mentha spicata var. viridis*
 655 *Elephantopus scaber*
 657 *Equisetum hyemale*
 657 *Rudbeckia triloba*
 658 *Ophrys liliifolia*
 660 *Saponaria officinalis*
 664 *Potamogeton nutans*
 665 *Convolvulus repens*
 667 *Coreopsis angustifolia*
 667 *Salicornia virginica*
 668 *Orchis psycodes*
 670 *Polygonum persicaria*
 671 *Phytolacca americana*
 672 *Polygonum persicaria*
 673 *Hamamelis virginiana*
 674 *Onoclea sensibilis*
 679 *Populus nigra*
 681 *Rhus vernix*
 682 *Pteris atropurpurea*
 684 *Myrica asplenifolia*
 685 *Acrostichum polypodioides*
 688 *Betula nigra*
 691 *Erythronium dens-canis*
 696 *Vitis vinifera*
 699 *Potentilla reptans*
 701 *Ranunculus abortivus*
 703 *Rubus fruticosus*
 704 *Asarum virginicum*
 708 *Ophrys liliifolia*
 710 *Ranuculus repens*
 714 *Onoclea sensibilis*
 717 *Sarracenia purpurea*
 719 *Myrica asplenifolia*
 721 *Sison canadense*
 723 *Alisma subulata*
 724 *Ambrosia trifida*
 728 *Rhus copallina*
 732 *Bunias cakile*
 733 *Solidago sempervirens*
 741 *Oxalis longiflora*
 745 *Arabis canadensis*
 767 *Aster divaricatus*
 768 *Polypremum procumbens*
 774 *Ammannia ramosior*
 793 *Viola palmata*
 884 *Juniperus virginiana*

**Species of Vascular Plants
from Temperate North America
Attributed to Peter Kalm by
Linnaeus in Species Plantarum
or in the Linnaean Herbarium**

<i>Acalypha virginica</i>	<i>Cephalanthus occidentalis</i>
<i>Acer negundo</i>	<i>Cercis canadense</i>
<i>Acer pensylvanicum</i>	<i>Chaerophyllum arborescens</i>
<i>Acer rubrum</i>	<i>Chelone glabra</i>
<i>Acer saccharinum</i>	<i>Chenopodium anthelminticum</i>
<i>Adiantum pedatum</i>	<i>Chenopodium virginicum</i>
<i>Agrostis virginica</i>	<i>Chironia angularis</i>
<i>Allium canadense</i>	<i>Chironia campanulata</i>
<i>Amaranthus retroflexus</i>	<i>Chrysocoma graminifolia</i>
<i>Andromeda mariana</i>	<i>Chrysosplenium oppositifolium</i>
<i>Andromeda paniculata</i>	<i>Cicuta bulbifera</i>
<i>Andromeda racemosa</i>	<i>Cicuta maculata</i>
<i>Andropogon nutans</i>	<i>Cinna arundinacea</i>
<i>Anemone quinquefolia</i>	<i>Cistus canadensis</i>
<i>Anemone thalictroides</i>	<i>Claytonia virginica</i>
<i>Anemone virginiana</i>	<i>Collinsonia canadensis</i>
<i>Angelica sylvestris</i>	<i>Convolvulus spithameus</i>
<i>Antirrhinum canadense</i>	<i>Conyza asteroides</i>
<i>Arabis canadensis</i>	<i>Cornus canadensis</i>
<i>Arabis lyra</i>	<i>Cornus florida</i>
<i>Aralia spinosa</i>	<i>Cracca virginiana</i>
<i>Arenaria rubra var. marina</i>	<i>Crataegus coccinea</i>
<i>Arethusa bulbosa</i>	<i>Crataegus crus-galli</i>
<i>Arethusa ophioglossoides</i>	<i>Crataegus tomentosa</i>
<i>Aristolochia serpentaria</i>	<i>Crotalaria sagittalis</i>
<i>Asarum canadense</i>	<i>Cucubalus stellatus</i>
<i>Asclepias nivea</i>	<i>Cupressus thyoides</i>
<i>Asclepias tuberosa</i>	<i>Cuscuta americana</i>
<i>Asplenium rhizophyllum</i>	<i>Cynoglossum virginianum</i>
<i>Aster concolor</i>	<i>Cyperus strigosus</i>
<i>Aster cordifolius</i>	<i>Dalibarda repens</i>
<i>Aster laevis</i>	<i>Datisca hirta</i>
<i>Aster linariifolius</i>	<i>Dianthera americana</i>
<i>Aster novi-belgii</i>	<i>Diospyros virginiana</i>
<i>Aster puniceus</i>	<i>Dracocephalum virginianum</i>
<i>Aster undulatus</i>	<i>Dracontium foetidum</i>
<i>Astragalus canadensis</i>	<i>Elymus canadensis</i>
<i>Avena pensylvanica</i>	<i>Erigeron philadelphicum</i>
<i>Avena spicata</i>	<i>Eupatorium rotundifolium</i>
<i>Azalea lutea</i>	<i>Euphorbia corollata</i>
<i>Azalea viscosa</i>	<i>Euphorbia ipecacuanhae</i>
<i>Bartsia coccinea</i>	<i>Euphorbia polygonifolia</i>
<i>Briza eragrostis</i>	<i>Euphorbia portulacoides</i>
<i>Bromus ciliatus</i>	<i>Euonymus americanus</i>
<i>Bromus purgans</i>	<i>Fagus pumila</i>
<i>Cacalia atriplicifolia</i>	<i>Galium tinctorium</i>
<i>Carex folliculata</i>	<i>Galium trifidum</i>
<i>Carex squarrosa</i>	<i>Gentiana quinquefolia</i>
<i>Carpinus betulus</i>	<i>Gentiana saponaria</i>
<i>Cassia nictitans</i>	<i>Geranium carolinianum</i>
<i>Ceanothus americanus</i>	<i>Gerardia flava</i>
<i>Celastrus myrtifolius</i>	<i>Gerardia pedicularia</i>
<i>Celtis occidentalis</i>	<i>Gerardia purpurea</i>
<i>Cenchrus tribuloides</i>	<i>Gleditsia triacanthos</i>
	<i>Glycine apios</i>
	<i>Glycine bracteata</i>
	<i>Glycine comosa</i>
	<i>Gnaphalium margaritaceum</i>
	<i>Gnaphalium obtusifolium</i>
	<i>Gnaphalium plantaginifolium</i>

<i>Gnaphalium purpureum</i>	<i>Ophrys cernua</i>
<i>Gratiola virginiana</i>	<i>Ophrys liliifolia</i>
<i>Hamamelis virginiana</i>	<i>Orchis psycodes</i>
<i>Hedera quinquefolia</i>	<i>Origanum vulgare</i>
<i>Hedysarum hirtum</i>	<i>Ornithogalum hirsutum</i>
<i>Hedysarum violaceum</i>	<i>Orobanche virginiana</i>
<i>Helianthus decapetalus</i>	<i>Osmunda cinnamomea</i>
<i>Heuchera americana</i>	<i>Osmunda regalis</i>
<i>Hibiscus palustris</i>	<i>Osmunda virginiana</i>
<i>Hieracium gronovii</i>	<i>Oxalis stricta</i>
<i>Hieracium kalmii</i>	<i>Oxalis violacea</i>
<i>Hieracium paniculatum</i>	<i>Panax quinquefolius</i>
<i>Hippophae canadensis</i>	<i>Panicum clandestinum</i>
<i>Hordeum jubatum</i>	<i>Panicum crusgalli</i>
<i>Houstonia caerulea</i>	<i>Panicum dichotomum</i>
<i>Houstonia purpurea</i>	<i>Panicum dissectum</i>
<i>Hydrangea arborescens</i>	<i>Panicum filiforme</i>
<i>Hydrocotyle americana</i>	<i>Panicum latifolium</i>
<i>Hydrocotyle umbellata</i>	<i>Phlox maculata</i>
<i>Hyoseris virginica</i>	<i>Phlox subulata</i>
<i>Hypericum canadense</i>	<i>Pinus strobus</i>
<i>Hypericum kalmianum</i>	<i>Pinus taeda</i>
<i>Hypericum mutilum</i>	<i>Plantago virginica</i>
<i>Impatiens noti-tangere</i>	<i>Poa capillaris</i>
<i>Iris verna</i>	<i>Polygonala incarnata</i>
<i>Juglans alba</i>	<i>Polygonala lutea</i>
<i>Lactuca canadensis</i>	<i>Polygonala sanguinea</i>
<i>Laurus sassafras</i>	<i>Polygala verticillata</i>
<i>Lilium canadense</i>	<i>Polygala viridescens</i>
<i>Limodorum tuberosum</i>	<i>Polygonum articulatum</i>
<i>Linum virginianum</i>	<i>Polygonum erectum</i>
<i>Liquidambar peregrina</i>	<i>Polygonum pensylvanicum</i>
<i>Liquidambar styraciflua</i>	<i>Polypodium marginale</i>
<i>Liriodendron tulipifera</i>	<i>Polypodium noveboracense</i>
<i>Lobelia cliffortiana</i>	<i>Polytmnia canadensis</i>
<i>Lobelia kalmii</i>	<i>Pontederia cordata</i>
<i>Ludwigia alternifolia</i>	<i>Potentilla canadensis</i>
<i>Lupinus perennis</i>	<i>Prenanthes alba</i>
<i>Lycopodium alopecuroides</i>	<i>Prinos glaber</i>
<i>Lycopodium apodum</i>	<i>Prinos verticillatus</i>
<i>Lycopodium complanatum</i>	<i>Pteris atropurpurea</i>
<i>Lycopodium obscurum</i>	<i>Pulmonaria virginica</i>
<i>Lycopodium rupestre</i>	<i>Pyrola maculata</i>
<i>Magnolia virginiana</i>	<i>Pyrola umbellata</i>
var. <i>glauca</i>	<i>Quercus alba</i>
<i>Medeola virginica</i>	<i>Quercus nigra</i>
<i>Melanthium virginicum</i>	<i>Quercus phellos</i>
<i>Melissa pulegioides</i>	<i>Quercus prinus</i>
<i>Menispermum canadense</i>	<i>Quercus rubra</i>
<i>Mentha canadensis</i>	<i>Ranunculus abortivus</i>
<i>Mespilus arbutifolia</i>	<i>Rhexia virginica</i>
<i>Mespilus canadensis</i>	<i>Rhus glabra</i>
<i>Mitella diphylla</i>	<i>Rhus radicans</i>
<i>Mollugo verticillata</i>	<i>Rhus toxicodendron</i>
<i>Monotropa uniflora</i>	<i>Rhus vernix</i>
<i>Morus rubra</i>	<i>Ribes cynosbati</i>
<i>Nymphaea lotus</i>	<i>Rubus canadensis</i>
<i>Nymphaea lutea</i>	<i>Rubus hispida</i>
<i>Nyssa aquatica</i>	<i>Rubus occidentalis</i>
<i>Oenothera fruticosa</i>	<i>Rumex persicarioides</i>

Salvia lyrata
Sambucus canadensis
Sanguinaria canadensis
Sanguisorba canadensis
Sarothra gentianoides
Satureja origanoides
Saxifraga nivalis
Saxifraga pensylvanica
Schoenus glomeratus
Scirpus capitatus
Scutellaria hyssopifolia
Scutellaria integrifolia
Senecio canadensis
Serratula praeculta
Serratula spicata
Silene nocturna
Silene virginica
Sison canadense
Sisyrinchium bermudiana
Smilax caduca
Smilax pseudo-china
Smilax rotundifolia
Smilax tamnoides
Smyrnium aureum
Solidago canadensis
Solidago flexicaulis
Solidago lateriflora
Sonchus canadensis
Sophora tinctoria
Spiraea opulifolia
Spiraea tomentosa
Spiraea trifoliata
Swertia corniculata
Thalictrum dioicum
Thapsia trifoliata
Thesium umbellatum
Thuja occidentalis
Trogopogon virginicum
Trifolium arvense
Trifolium biflorum
Trillium cernuum
Trillium erectum
Ulmus americana
Uniola spicata
Urtica capitata
Urtica cylindrica
Urtica divaricata
Urtica pumila
Utricularia subulata
Uvularia perfoliata
Uvularia sessilifolia
Vaccinium album
Vaccinium corymbosum
Vaccinium frondosum
Vaccinium hispidulum
Vaccinium ligustrinum
Vaccinium mucronatum
Vaccinium stamineum
Veratrum luteum
Viburnum acerifolium

Viburnum lentago
Viburnum prunifolium
Viola canadensis
Viola lanceolata
Viola pedata
Viscum terestre
Vitis labrusca
Vitis laciniata
Vitis vinifera
Vitis vulpina
Xyris indica

Selected Literature Cited by Linnaeus in the First Edition of *Species Plantarum* for Seemingly Temperate North American Vascular Plants

Bauhin

Acnida cannabina
Adiantum pedatum
Amaranthus lividus
Cornus canadensis
Diospyros virginiana
Helianthus multiflorus
Hibiscus palustris
Laurus sassafras
Othonna cineraria
Rhus glabra
Rudbeckia laciniata
Sarracenia flava
Sarracenia purpurea
Smilax bona-nox
Spiraea hypericifolia
Tradescantia virginiana
Trillium erectum
Uvularia perfoliata
Verbena nodiflora
Vitis labrusca

Catesby

Acer rubrum
Amaryllis atamasca
Andromeda arborea
Andromeda paniculata
Annona glabra
Annona triloba
Arethusa divaricata
Aristolochia serpentaria
Azalea viscosa
Bignonia caerulea
Bignonia radicans
Bignonia sempervirens
Callicarpa americana
Chionanthus virginica
Cissampelos smilacina
Clethra alnifolia
Cornus florida
Cupressus distichia
Diospyros virginiana

Dodecatheon meadia	Aralia racemosa
Erythrina herbacea	Azalea lutea
Fagus pumila	Azalea viscosa
Fraxinus americana	Collinsonia canadensis
Gentiana saponaria	Cucubalus stellatus
Gleditsia triacanthos	Dracontium foetidum
Hamamelis virginiana	Eupatorium perfoliatum
Ilex cassine	Eupatorium purpureum
Ipomoea carolina	Eupatorium scandens
Juglans alba	Gaultheria procumbens
Juglans nigra	Hamamelis virginiana
Kalmia angustifolia	Hieracium venosum
Kalmia latifolia	Holosteum succulentum
Laurus borbonia	Kalmia angustifolia
Laurus sassafras	Laurus sassafras
Lilium canadense	Leontice thalictroides
Liriodendron tulipifera	Mitella diphylla
Lonicera marilandica	Monarda didyma
Magnolia virginiana	Myrica asplenifolia
var. acuminata	Pinus strobus
Magnolia virginiana	Pinus taeda
var. foetida	Polygonum sagittatum
Magnolia virginiana	Polygonum scandens
var. glauca	Pontederia cordata
Magnolia virginiana	Rhus glabra
var. tripetala	Rumex britannica
Mitchella repens	Saxifraga pensylvanica
Monotropa uniflora	Staphylea trifolia
Myrica cerifera	Trillium cernuum
Nyssa aquatica	Uvularia perfoliata
Panax quinquefolius	Uvularia sessilifolia
Philadelphus inodorus	Veronica virginica
Platanus occidentalis	
Podophyllum peltatum	Cornuti
Populus balsamifera	Actaea spicata var. alba
Prunus virginiana	Adiantum pedatum
Quercus alba	Ageratum altissimum
Quercus nigra	Angelica atropurpurea
Quercus phellos	Angelica lucida
Quercus prinus	Aquilegia canadensis
Quercus rubra	Aralia racemosa
Rhododendron maximum	Asarum canadense
Robinia pseudoacacia	Asclepias incarnata
Rudbeckia purpurea	Asclepias syriaca
Rumex sanguineus	Aster annuus
Sarracenia flava	Bignonia radicans
Sarracenia purpurea	Convallaria racemosa
Sloanea emarginata	Convallaria stellata
Smilax laurifolia	Eupatorium purpureum
Smilax tamnoides	Fumaria coccinea
Stewartia malacodendron	Fumaria sempervirens
Trillium cernuum	Glycine apios
Trillium sessile	Hedera quinquefolia
Uniola paniculata	Hedysarum canadense
Viscum purpureum	Helenium autumnale
Viscum rubrum	Hibiscus moscheutos

Colden

Acer rubrum
Ambrosia elatior

Monarda fistulosa
Polypodium bulbiferum
Rhus radicans
Rubus odoratus

<i>Rudbeckia laciniata</i>	<i>Ptelea trifoliata</i>
<i>Sanguinaria canadensis</i>	<i>Rhus glabra</i>
<i>Sanguisorba canadensis</i>	<i>Rhus radicans</i>
<i>Solidago sempervirens</i>	<i>Ribes oxyacanthoides</i>
<i>Thalictrum cornutum</i>	<i>Rosa carolina</i>
<i>Trillium erectum</i>	<i>Rubus occidentalis</i>
<i>Uvularia perfoliata</i>	<i>Rudbeckia hirta</i>
 Dilleniaceae	<i>Ruellia biflora</i>
<i>Actaea racemosa</i>	<i>Ruellia strepens</i>
<i>Asclepias amoena</i>	<i>Sanguinaria canadensis</i>
<i>Asclepias purpurascens</i>	<i>Saxifraga pensylvanica</i>
<i>Asclepias tuberosa</i>	<i>Serratula glauca</i>
<i>Asclepias variagata</i>	<i>Serratula praealta</i>
<i>Aster ericoides</i>	<i>Serratula spicata</i>
<i>Aster grandiflorus</i>	<i>Serratula squarrosa</i>
<i>Aster miser</i>	<i>Silene antirrhina</i>
<i>Astragalus canadensis</i>	<i>Silphium asteriscus</i>
<i>Astragalus carolinianus</i>	<i>Solanum carolinense</i>
<i>Baccharis foetida</i>	<i>Solanum virginianum</i>
<i>Bidens nivea</i>	<i>Solidago altissima</i>
<i>Bidens pilosa</i>	<i>Solidago caesia</i>
<i>Canna glauca</i>	<i>Spermacoce tenuior</i>
<i>Carduus altissimus</i>	<i>Tetragonotheca helianthoides</i>
<i>Clematis crispa</i>	<i>Trichostema brachiatum</i>
<i>Clematis viorna</i>	<i>Triosteum perfoliatum</i>
 Gronovius	
<i>Commelina communis</i>	<i>Acer negundo</i>
<i>Commelina erecta</i>	<i>Acer rubrum</i>
<i>Convolvulus carolinus</i>	<i>Acnida cannabina</i>
<i>Coreopsis lanceolata</i>	<i>Acrostichum areolatum</i>
<i>Crotalaria perfoliata</i>	<i>Acrostichum platyneuros</i>
<i>Erythrina herbacea</i>	<i>Actaea racemosa</i>
<i>Eupatorium coelestinum</i>	<i>Adiantum pedatum</i>
<i>Eupatorium hyssopifolium</i>	<i>Agave virginica</i>
<i>Geranium carolinianum</i>	<i>Ageratum altissimum</i>
<i>Glycine tomentosa</i>	<i>Aletris farinosa</i>
<i>Gnaphalium obtusifolium</i>	<i>Alisma subulata</i>
<i>Gnaphalium purpureum</i>	<i>Amaranthus graecizans</i>
<i>Hedysarum marilandicum</i>	<i>Amaranthus lividus</i>
<i>Hedysarum volubile</i>	<i>Amaryllis atamasca</i>
<i>Helianthus atrorubens</i>	<i>Ambrosia elatior</i>
<i>Horminum virginicum</i>	<i>Ambrosia trifida</i>
<i>Ipomoea lacunosa</i>	<i>Anchusa virginiana</i>
<i>Ipomoea tannifolia</i>	<i>Andromeda arborea</i>
<i>Iris versicolor</i>	<i>Andromeda mariana</i>
<i>Lonicera symphoricarpos</i>	<i>Andromeda paniculata</i>
<i>Lycopodium alopecuroides</i>	<i>Andropogon alopecuroides</i>
<i>Lycopodium apodum</i>	<i>Andropogon divaricatum</i>
<i>Lycopodium carolinianum</i>	<i>Andropogon virginicum</i>
<i>Lycopodium obscurum</i>	<i>Anemone thalictroides</i>
<i>Magnolia virginiana</i>	<i>Anemone virginiana</i>
var. <i>glauca</i>	<i>Antirrhinum canadense</i>
<i>Malva caroliniana</i>	<i>Apocynum cannabinum</i>
<i>Mensipernum virginicum</i>	<i>Aquilegia canadensis</i>
<i>Parthenium integrifolium</i>	<i>Arabis canadensis</i>
<i>Phaseolus helvulus</i>	<i>Arabis lyrata</i>
<i>Phlox glaberrima</i>	<i>Aralia spinosa</i>
<i>Polemonium rubrum</i>	<i>Arethusa bulbosa</i>
<i>Polygonum scandens</i>	<i>Arethusa divaricata</i>

<i>Arethusa ophioglossoides</i>	<i>Coreopsis angustifolia</i>
<i>Aristolochia serpentaria</i>	<i>Coreopsis auriculata</i>
<i>Arum virginicum</i>	<i>Coreopsis verticillata</i>
<i>Asarum canadense</i>	<i>Cornus florida</i>
<i>Asarum virginicum</i>	<i>Cracca virginiana</i>
<i>Asclepias decumbens</i>	<i>Crataegus coccinea</i>
<i>Asclepias incarnata</i>	<i>Crataegus crus-galli</i>
<i>Asclepias rubra</i>	<i>Crataegus tomentosa</i>
<i>Asclepias syriaca</i>	<i>Crataegus viridis</i>
<i>Asclepias verticillata</i>	<i>Cucubalus stellatus</i>
<i>Ascyrum hypericoides</i>	<i>Cupressus distichia</i>
<i>Aster concolor</i>	<i>Cuscuta americana</i>
<i>Aster divaricatus</i>	<i>Cynoglossum virginianum</i>
<i>Aster dumosus</i>	<i>Cyperus arundinacea</i>
<i>Aster ericoides</i>	<i>Cyperus odoratus</i>
<i>Aster grandiflorus</i>	<i>Dianthera americana</i>
<i>Aster linifolius</i>	<i>Diodia virginiana</i>
<i>Aster novae-angliae</i>	<i>Dioscorea villosa</i>
<i>Aster rigidus</i>	<i>Diospyros virginiana</i>
<i>Aster vernus</i>	<i>Dirca palustris</i>
<i>Azalea lutea</i>	<i>Dolichos polystachyus</i>
<i>Azalea viscosa</i>	<i>Dolichos regularis</i>
<i>Baccharis foetida</i>	<i>Dracontium foetidum</i>
<i>Baccharis halimifolia</i>	<i>Elephantopus tomentosus</i>
<i>Bartsia coccinea</i>	<i>Elymus virginicus</i>
<i>Betula lenta</i>	<i>Epigaea repens</i>
<i>Betula nigra</i>	<i>Erigeron camphoratum</i>
<i>Bignonia radicans</i>	<i>Eriocaulon decangulare</i>
<i>Buchnera americana</i>	<i>Eriophorum virginicum</i>
<i>Buphtalmum helianthoides</i>	<i>Eryngium aquaticum</i>
<i>Burmannia biflora</i>	<i>Eupatorium aromaticum</i>
<i>Calacalia atriplicifolia</i>	<i>Eupatorium coelestinum</i>
<i>Callicarpa americana</i>	<i>Eupatorium perfoliatum</i>
<i>Campanula perfoliata</i>	<i>Eupatorium purpureum</i>
<i>Cardamine virginica</i>	<i>Eupatorium scandens</i>
<i>Carduus virginianus</i>	<i>Eupatorium trifoliatum</i>
<i>Cassia marilandica</i>	<i>Euphorbia corollata</i>
<i>Ceanothus americanus</i>	<i>Euphorbia ipecacuanhae</i>
<i>Celastrus scandens</i>	<i>Euphorbia polygonifolia</i>
<i>Celosia paniculata</i>	<i>Euonymus americanus</i>
<i>Celtis occidentalis</i>	<i>Fagus pumila</i>
<i>Cenchrus tribuloides</i>	<i>Ferula canadensis</i>
<i>Cephalanthus occidentalis</i>	<i>Fraxinus americana</i>
<i>Cercis canadensis</i>	<i>Fumaria cucullaria</i>
<i>Chelone glabra</i>	<i>Galax aphylla</i>
<i>Chelone hirsuta</i>	<i>Galium bermudense</i>
<i>Chionanthus virginica</i>	<i>Gentiana saponaria</i>
<i>Chironia dodecandra</i>	<i>Gentiana villosa</i>
<i>Chrysogonium virginianum</i>	<i>Geranium carolinianum</i>
<i>Cicuta bulbifera</i>	<i>Gerardia flava</i>
<i>Cicuta maculata</i>	<i>Gerardia pedicularia</i>
<i>Claytonia virginica</i>	<i>Gerardia purpurea</i>
<i>Clematis viorna</i>	<i>Geum virginianum</i>
<i>Clitoria virginiana</i>	<i>Gleditsia triacanthos</i>
<i>Commelina communis</i>	<i>Glycine apios</i>
<i>Commelina erecta</i>	<i>Glycine bracteata</i>
<i>Convallaria racemosa</i>	<i>Glycine comosa</i>
<i>Convolvulus panduratus</i>	<i>Glycine tomentosa</i>
<i>Convolvulus repens</i>	<i>Gnaphalium obtusifolium</i>
<i>Convolvulus spithameus</i>	<i>Gnaphalium plantaginifolium</i>

<i>Gnaphalium purpureum</i>	<i>Lycopodium alopecuroides</i>
<i>Gratiola dubia</i>	<i>Lycopsis virginica</i>
<i>Gratiola virginiana</i>	<i>Lycopus virginicus</i>
<i>Hamamelis virginiana</i>	<i>Lysimachia quadrifolia</i>
<i>Hedera quinquefolia</i>	<i>Lythrum lineare</i>
<i>Hedysarum frutescens</i>	<i>Lythrum petiolatum</i>
<i>Hedysarum hirtum</i>	<i>Lythrum verticillatum</i>
<i>Hedysarum marilandicum</i>	<i>Magnolia virginiana</i>
<i>Hedysarum nudiflorum</i>	<i>Magnolia virginiana</i>
<i>Hedysarum paniculatum</i>	var. <i>acuminata</i>
<i>Hedysarum repens</i>	<i>Magnolia virginiana</i>
<i>Hedysarum violaceum</i>	var. <i>foetida</i>
<i>Hedysarum virginicum</i>	<i>Medeola virginiana</i>
<i>Hedysarum viridiflorum</i>	<i>Medicago virginica</i>
<i>Helenium autumnale</i>	<i>Melanthium virginicum</i>
<i>Helianthus angustifolius</i>	<i>Melissa pulegioides</i>
<i>Helianthus atrorubens</i>	<i>Menispermum canadense</i>
<i>Helianthus giganteus</i>	<i>Menispermum virginicum</i>
<i>Helianthus laevis</i>	<i>Mespileus canadensis</i>
<i>Heuchera americana</i>	<i>Mimulus ringens</i>
<i>Hibiscus moscheutos</i>	<i>Mitchella repens</i>
<i>Hibiscus virginicus</i>	<i>Monarda ciliata</i>
<i>Hieracium gronovii</i>	<i>Monarda clinopodia</i>
<i>Hieracium venosum</i>	<i>Monarda punctata</i>
<i>Holcus laxus</i>	<i>Monotropa uniflora</i>
<i>Holcus striatus</i>	<i>Myosotis virginiana</i>
<i>Houstonia caerulea</i>	<i>Myrica asplenifolia</i>
<i>Houstonia purpurea</i>	<i>Myrica cerifera</i>
<i>Hydrangea arborescens</i>	<i>Nepeta virginica</i>
<i>Hydrocotyle umbellata</i>	<i>Nyssa aquatica</i>
<i>Hydrophyllum virginianum</i>	<i>Obularia virginica</i>
<i>Hyoseris virginica</i>	<i>Oenothera fruticosa</i>
<i>Hypericum muticum</i>	<i>Oldenlandia uniflora</i>
<i>Hypericum setosum</i>	<i>Onoclea sensibilis</i>
<i>Hyssopus nepetoides</i>	<i>Ophiorrhiza mitreola</i>
<i>Iris verna</i>	<i>Orchis ciliaris</i>
<i>Iris virginica</i>	<i>Orchis flava</i>
<i>Itea virginica</i>	<i>Orchis psycodes</i>
<i>Juglans alba</i>	<i>Orchis spectabilis</i>
<i>Juglans nigra</i>	<i>Ornithogalum bivale</i>
<i>Juniperus virginiana</i>	<i>Ornithogalum hirsutum</i>
<i>Kalmia angustifolia</i>	<i>Orobanche uniflora</i>
<i>Kalmia latifolia</i>	<i>Orobanche virginiana</i>
<i>Laurus aestivalis</i>	<i>Orontium aquaticum</i>
<i>Laurus benzoin</i>	<i>Osmunda virginiana</i>
<i>Laurus borbonia</i>	<i>Osteospermum uvedalia</i>
<i>Laurus sassafras</i>	<i>Oxalis stricta</i>
<i>Lechea minor</i>	<i>Oxalis violacea</i>
<i>Leontice thalictroides</i>	<i>Panax quinquefolius</i>
<i>Leontodon dandelion</i>	<i>Panax trifolius</i>
<i>Limodorum tuberosum</i>	<i>Panicum dichotomum</i>
<i>Linum virginianum</i>	<i>Panicum virgatum</i>
<i>Liriodendron tulipifera</i>	<i>Parthenium integrifolium</i>
<i>Lithospermum virginianum</i>	<i>Penthorum sedoides</i>
<i>Lobelia cardinalis</i>	<i>Phalaris oryzoides</i>
<i>Lobelia cliffortiana</i>	<i>Phlox glaberrima</i>
<i>Lonicera marilandica</i>	<i>Phryma leptostachya</i>
<i>Lonicera symphoricarpos</i>	<i>Pinus balsamea</i>
<i>Ludwigia alternifolia</i>	<i>Pinus taeda</i>
<i>Lupinus perennis</i>	<i>Plantago virginica</i>

<i>Platanus occidentalis</i>	<i>Scutellaria hyssopifolia</i>
<i>Poa capillaris</i>	<i>Scutellaria integrifolia</i>
<i>Poa flava</i>	<i>Scutellaria lateriflora</i>
<i>Podophyllum peltatum</i>	<i>Senecio aureus</i>
<i>Polemonium dubium</i>	<i>Serratula glauca</i>
<i>Polygala cruciata</i>	<i>Serratula scariosa</i>
<i>Polygala senega</i>	<i>Serratula spicata</i>
<i>Polygala verticillata</i>	<i>Serratula squarrosa</i>
<i>Polygala virides</i>	<i>Sigesbeckia occidentalis</i>
<i>Polygonum sagittatum</i>	<i>Silene antirrhina</i>
<i>Polygonum scandens</i>	<i>Silene virginica</i>
<i>Polygonum virginianum</i>	<i>Silphium asteriscus</i>
<i>Populus heterophylla</i>	<i>Silphium helianthoides</i>
<i>Pontederia cordata</i>	<i>Sison canadense</i>
<i>Prenanthes alba</i>	<i>Sium rigidius</i>
<i>Prinos verticillatus</i>	<i>Smilax herbacea</i>
<i>Prunus virginiana</i>	<i>Smilax lanceolata</i>
<i>Pteris atropurpurea</i>	<i>Smilax laurifolia</i>
<i>Pulmonaria virginica</i>	<i>Smyrnium aureum</i>
<i>Pyrola maculata</i>	<i>Smyrnium integrifolium</i>
<i>Pyrus coronaria</i>	<i>Solidago canadensis</i>
<i>Quercus alba</i>	<i>Solidago sempervirens</i>
<i>Quercus nigra</i>	<i>Sonchus canadensis</i>
<i>Quercus phellos</i>	<i>Sophora tinctoria</i>
<i>Quercus prinus</i>	<i>Spiraea opulifolia</i>
<i>Quercus rubra</i>	<i>Spiraea trifoliata</i>
<i>Queria canadensis</i>	<i>Staphylea trifolia</i>
<i>Ranunculus abortivus</i>	<i>Stipa avenacea</i>
<i>Rhexia virginica</i>	<i>Swertia difformis</i>
<i>Rhinanthus virginica</i>	<i>Tetragonotheca helianthoides</i>
<i>Rhus copallina</i>	<i>Teucrium canadense</i>
<i>Rhus glabra</i>	<i>Teucrium virginicum</i>
<i>Rhus radicans</i>	<i>Thapsia trifoliata</i>
<i>Rhus toxicodendron</i>	<i>Tilia americana</i>
<i>Robinia pseudoacacia</i>	<i>Tradescantia virginiana</i>
<i>Rudbeckia hirta</i>	<i>Trigopogon virginicum</i>
<i>Rudbeckia laciniata</i>	<i>Trichostema dichotomum</i>
<i>Rudbeckia oppositifolia</i>	<i>Trifolium biflorum</i>
<i>Rudbeckia purpurea</i>	<i>Trifolium reflexum</i>
<i>Rudbeckia triloba</i>	<i>Trillium sessile</i>
<i>Ruellia strepens</i>	<i>Triosteum angustifolium</i>
<i>Rumex britannica</i>	<i>Ulmus americana</i>
<i>Rumex verticillatus</i>	<i>Uniola paniculata</i>
<i>Salvia lyrata</i>	<i>Urtica pumila</i>
<i>Salvia urticifolia</i>	<i>Utricularia gibba</i>
<i>Sanguinaria canadensis</i>	<i>Utricularia subulata</i>
<i>Sanicula canadensis</i>	<i>Uvularia perfoliata</i>
<i>Sanicula marilandica</i>	<i>Vaccinium frondosum</i>
<i>Sarothra gentianoides</i>	<i>Vaccinium stamineum</i>
<i>Sarracenia flava</i>	<i>Valeriana locusta</i>
<i>Sarracenia purpurea</i>	var. <i>radiata</i>
<i>Satureja organoides</i>	<i>Veratrum luteum</i>
<i>Satureja virginiana</i>	<i>Verbena nodiflora</i>
<i>Saururus cernuus</i>	<i>Verbena spuria</i>
<i>Saxifraga pensylvanica</i>	<i>Verbena urticifolia</i>
<i>Scandix procumbens</i>	<i>Verbesina virginica</i>
<i>Schwalbea americana</i>	<i>Veronica marilandica</i>
<i>Schoenus glomeratus</i>	<i>Veronica virginica</i>
<i>Scirpus capitatus</i>	<i>Viburnum acerifolium</i>
<i>Scrophularia marilandica</i>	<i>Viburnum nudum</i>

<i>Viburnum prunifolium</i>	<i>Aster linifolius</i>
<i>Viola palmata</i>	<i>Aster novae-angliae</i>
<i>Viola pedata</i>	<i>Aster novi-belgii</i>
<i>Yucca filamentosa</i>	<i>Aster puniceus</i>
Hermann	<i>Aster tradescantii</i>
<i>Acer rubrum</i>	<i>Aster undulatus</i>
<i>Ambrosia elatior</i>	<i>Azalea lutea</i>
<i>Anemone virginiana</i>	<i>Baccharis halimifolia</i>
<i>Arum dracontium</i>	<i>Bartsia coccinea</i>
<i>Asclepias purpurascens</i>	<i>Bidens pilosa</i>
<i>Asclepias tuberosa</i>	<i>Bignonia capreolata</i>
<i>Aster dumosus</i>	<i>Bignonia radicans</i>
<i>Aster novae-angliae</i>	<i>Burmannia biflora</i>
<i>Aster novi-belgii</i>	<i>Calocasia porophyllum</i>
<i>Aster puniceus</i>	<i>Cactus pentagonus</i>
<i>Aster undulatus</i>	<i>Campanula perfoliata</i>
<i>Baccharis halimifolia</i>	<i>Canna glauca</i>
<i>Bidens bipinnata</i>	<i>Cassia marilandica</i>
<i>Campanula americana</i>	<i>Cassia nictitans</i>
<i>Cynanchum hirtum</i>	<i>Ceanothus americanus</i>
<i>Eupatorium purpureum</i>	<i>Cephaelanthus occidentalis</i>
<i>Geum virginianum</i>	<i>Cercis canadensis</i>
<i>Helianthus strumosus</i>	<i>Chelone glabra</i>
<i>Heuchera americana</i>	<i>Chionanthus virginica</i>
<i>Juglans nigra</i>	<i>Chrysanthemum serotinum</i>
<i>Liriodendron tulipifera</i>	<i>Chrysogonum virginianum</i>
<i>Mespilus arbutifolia</i>	<i>Coix dactyloides</i>
<i>Mitella diphylla</i>	<i>Collinsonia canadensis</i>
<i>Napaea hermaphrodita</i>	<i>Commelina communis</i>
<i>Ranunculus abortivus</i>	<i>Commelina erecta</i>
<i>Satureja virginiana</i>	<i>Convallaria racemosa</i>
<i>Senecio hieracifolius</i>	<i>Coreopsis lanceolata</i>
<i>Solidago flexicaulis</i>	<i>Cornus florida</i>
<i>Solidago rigidia</i>	<i>Cracca virginiana</i>
<i>Solidago sempervirens</i>	<i>Crataegus coccinea</i>
<i>Staphylea trifolia</i>	<i>Crotalaria alba</i>
<i>Verbena hastata</i>	<i>Cupressus distichia</i>
Linnaeus Hort. Cliff.	<i>Cynanchum hirtum</i>
<i>Acer negundo</i>	<i>Diodia virginiana</i>
<i>Ageratum altissimum</i>	<i>Diospyros virginiana</i>
<i>Amaranthus hypocondriacus</i>	<i>Dracocephalum virginianum</i>
<i>Amaryllis atamasca</i>	<i>Erythrina herbacea</i>
<i>Ambrosia trifida</i>	<i>Eupatorium perfoliatum</i>
<i>Amorpha fruticosa</i>	<i>Eupatorium purpureum</i>
<i>Andromeda paniculata</i>	<i>Eupatorium scandens</i>
<i>Angelica lucida</i>	<i>Euonymus americanus</i>
<i>Apocynum androsaemifolium</i>	<i>Fumaria cucullaria</i>
<i>Aralia racemosa</i>	<i>Fumaria sempervirens</i>
<i>Aralia spinosa</i>	<i>Geum virginianum</i>
<i>Arethusa ophioglossoides</i>	<i>Gleditsia triacanthos</i>
<i>Aristolochia arborescens</i>	<i>Glycine apios</i>
<i>Arum virginicum</i>	<i>Glycine frutescens</i>
<i>Asclepias incarnata</i>	<i>Hedera quinquefolia</i>
<i>Asclepias syriaca</i>	<i>Hedysarum canadense</i>
<i>Asclepias tuberosa</i>	<i>Hedysarum volubile</i>
<i>Ascyrum hypericoides</i>	<i>Helium autumnale</i>
<i>Aster annuus</i>	<i>Helianthus multiflorus</i>
<i>Aster dumosus</i>	<i>Helianthus strumosus</i>
	<i>Heuchera americana</i>
	<i>Hibiscus moscheutos</i>

<i>Houstonia caerulea</i>	<i>Serratula squarrosa</i>
<i>Hydrophyllum virginianum</i>	<i>Silphium asteriscus</i>
<i>Hyssopus nepetoides</i>	<i>Sison canadense</i>
<i>Ilex cassine</i>	<i>Smilax lanceolata</i>
<i>Juglans nigra</i>	<i>Smyrnium aureum</i>
<i>Juniperus virginiana</i>	<i>Solanum carolinense</i>
<i>Jussiaea erecta</i>	<i>Solanum diphyllum</i>
<i>Laurus benzoin</i>	<i>Solanum tomentosum</i>
<i>Laurus borbonia</i>	<i>Solidago canadensis</i>
<i>Laurus sassafras</i>	<i>Solidago rigida</i>
<i>Liriodendron tulipifera</i>	<i>Spiraea hypericifolia</i>
<i>Lobelia cardinalis</i>	<i>Spiraea opulifolia</i>
<i>Lobelia cliffortiana</i>	<i>Spiraea trifoliata</i>
<i>Lobelia inflata</i>	<i>Staphylea trifolia</i>
<i>Lobelia siphilitica</i>	<i>Tradescantia virginiana</i>
<i>Lonicera symphoricarpos</i>	<i>Trichostema dichotomum</i>
<i>Ludwigia alternifolia</i>	<i>Uniola paniculata</i>
<i>Lycopodium alopecuroides</i>	<i>Uvularia perfoliata</i>
<i>Magnolia virginiana</i>	<i>Verbena nodiflora</i>
<i>Malva caroliniana</i>	<i>Verbena urticifolia</i>
<i>Menispermum canadense</i>	<i>Veronica virginica</i>
<i>Mespilus arbutifolia</i>	
<i>Mitella diphylla</i>	Linnaeus Hort. Upsal.
<i>Monarda didyma</i>	<i>Acer rubrum</i>
<i>Monarda fistulosa</i>	<i>Ageratum altissimum</i>
<i>Monarda punctata</i>	<i>Amaranthus hypocondriacus</i>
<i>Myrica asplenifolia</i>	<i>Ambrosia elatior</i>
<i>Myrica cerifera</i>	<i>Ambrosia trifida</i>
<i>Napaea hermaphrodita</i>	<i>Amorpha fruticosa</i>
<i>Nepeta virginica</i>	<i>Angelica lucida</i>
<i>Nyssa aquatica</i>	<i>Aquilegia canadensis</i>
<i>Obolaria virginica</i>	<i>Aralia racemosa</i>
<i>Onoclea sensibilis</i>	<i>Asclepias syriaca</i>
<i>Ophiorrhiza mitreola</i>	<i>Aster annuus</i>
<i>Osteospermum uvedalia</i>	<i>Aster novi-belgii</i>
<i>Parthenium integrifolium</i>	<i>Aster tradescantii</i>
<i>Phlox glaberrima</i>	<i>Bidens pilosa</i>
<i>Platanus occidentalis</i>	<i>Bignonia radicans</i>
<i>Podophyllum peltatum</i>	<i>Buphthalmum helianthoides</i>
<i>Polygonum sagittatum</i>	<i>Cacalia suaveolens</i>
<i>Polygonum virginianum</i>	<i>Campanula perfoliata</i>
<i>Populus balsamifera</i>	<i>Cassia marilandica</i>
<i>Pontederia cordata</i>	<i>Cassia nictitans</i>
<i>Prenanthes alba</i>	<i>Ceanothus americanus</i>
<i>Ptelea trifoliata</i>	<i>Cercis canadensis</i>
<i>Quercus prinus</i>	<i>Commelina communis</i>
<i>Quercus rubra</i>	<i>Commelina erecta</i>
<i>Rhus radicans</i>	<i>Coreopsis alternifolia</i>
<i>Robinia pseudoacacia</i>	<i>Coreopsis tripteris</i>
<i>Rubus odoratus</i>	<i>Cornus florida</i>
<i>Rudbeckia laciniata</i>	<i>Crataegus coccinea</i>
<i>Ruellia strepens</i>	<i>Cucubalus stellatus</i>
<i>Rumex sanguineus</i>	<i>Cupressus distichia</i>
<i>Sanguinaria canadensis</i>	<i>Erigeron camphoratum</i>
<i>Sanguisorba canadensis</i>	<i>Eupatorium altissimum</i>
<i>Sarracenia flava</i>	<i>Eupatorium perfoliatum</i>
<i>Sarracenia purpurea</i>	<i>Eupatorium scandens</i>
<i>Satureja virginiana</i>	<i>Eupatorium sessilifolium</i>
<i>Saururus cernuus</i>	<i>Euonymus americanus</i>
<i>Senecio hieracifolius</i>	<i>Fumaria sempervirens</i>

<i>Gleditsia triacanthos</i>	<i>Rhus copallina</i>
<i>Glycine apios</i>	<i>Rhus vernix</i>
<i>Helenium autumnale</i>	<i>Rumex britannica</i>
<i>Helianthus multiflorus</i>	<i>Rumex sanguineus</i>
<i>Hibiscus moscheutos</i>	
<i>Hyssopus nepetoides</i>	Linnaeus Nova Plantarum Genera
<i>Juglans nigra</i>	<i>Agave virginica</i>
<i>Jussiaea erecta</i>	<i>Arethusa bulbosa</i>
<i>Liriodendron tulipifera</i>	<i>Arethusa ophioglossoides</i>
<i>Lobelia cardinalis</i>	<i>Cracca virginiana</i>
<i>Lobelia inflata</i>	<i>Elymus canadensis</i>
<i>Ludwigia alternifolia</i>	<i>Epigaea repens</i>
<i>Malva caroliniana</i>	<i>Gaultheria procumbens</i>
<i>Menispermum canadense</i>	<i>Gaura biennis</i>
<i>Monarda fistulosa</i>	<i>Helonias bullata</i>
<i>Monarda punctata</i>	<i>Holosteum succulentum</i>
<i>Myrica cerifera</i>	<i>Kalmia angustifolia</i>
<i>Osteospermum uvedalia</i>	<i>Kalmia latifolia</i>
<i>Podophyllum peltatum</i>	<i>Lechea major</i>
<i>Ribes oxyacanthoides</i>	<i>Lechea minor</i>
<i>Robinia pseudoacacia</i>	<i>Mitchella repens</i>
<i>Rubus odoratus</i>	<i>Mitella diphylla</i>
<i>Rudbeckia laciniata</i>	<i>Napaea dioica</i>
<i>Rudbeckia triloba</i>	<i>Onoclea sensibilis</i>
<i>Ruellia strepens</i>	<i>Orontium aquaticum</i>
<i>Rumex sanguineus</i>	<i>Phryma leptostachya</i>
<i>Sanicula marilandica</i>	<i>Sarothra gentianoides</i>
<i>Saururus cernuus</i>	<i>Veratrum luteum</i>
<i>Scrophularia marilandica</i>	
<i>Senecio hieracifolius</i>	Linnaeus Virid. Cliffort.
<i>Solidago altissima</i>	<i>Aralia racemosa</i>
<i>Solidago canadensis</i>	<i>Aralia spinosa</i>
<i>Spiraea hypericifolia</i>	<i>Asclepias incarnata</i>
<i>Spiraea trifoliata</i>	<i>Asclepias syriaca</i>
<i>Tradescantia virginiana</i>	<i>Bignonia capreolata</i>
<i>Verbena hastata</i>	<i>Commelina communis</i>
<i>Verbena spuria</i>	<i>Commelina erecta</i>
<i>Verbena urticifolia</i>	<i>Hyssopus nepetoides</i>
Linnaeus Amoen. Acad.	<i>Monarda fistulosa</i>
<i>Bartsia coccinea</i>	<i>Rudbeckia laciniata</i>
<i>Cornus canadensis</i>	<i>Solanum carolinense</i>
<i>Polygonia cruentata</i>	<i>Solanum diphyllum</i>
<i>Polygonia lutea</i>	
<i>Polygonia senega</i>	Martyn
<i>Polygonia verticillata</i>	<i>Aster grandiflorus</i>
<i>Polygonia viridescens</i>	<i>Buphthalmum helianthoides</i>
<i>Rhododendron maximum</i>	<i>Cassia marilandica</i>
<i>Trillium erectum</i>	<i>Coreopsis lanceolata</i>
<i>Uvularia perfoliata</i>	<i>Crotalaria alba</i>
<i>Viola canadensis</i>	<i>Limodorum tuberosum</i>
Linnaeus Materia Medica	<i>Malva caroliniana</i>
<i>Actaea racemosa</i>	<i>Solidago altissima</i>
<i>Aristolochia serpentaria</i>	
<i>Ilex cassine</i>	Mitchell
<i>Laurus benzoin</i>	<i>Acnida cannabina</i>
<i>Laurus sassafras</i>	<i>Callicarpa americana</i>
<i>Panax quinquefolius</i>	<i>Chelone penstemon</i>
<i>Polygonia senega</i>	<i>Cracca virginiana</i>
	<i>Galax aphylla</i>
	<i>Hamamelis virginiana</i>

<i>Hedera quinquefolia</i>	<i>Eupatorium hyssopifolium</i>
<i>Itéa virginica</i>	<i>Eupatorium perfoliatum</i>
<i>Mitchella repens</i>	<i>Eupatorium purpureum</i>
<i>Onoclea sensibilis</i>	<i>Eupatorium rotundifolium</i>
<i>Phryma leptostachya</i>	<i>Eupatorium sessilifolium</i>
<i>Proserpinaca palustris</i>	<i>Fumaria sempervirens</i>
<i>Stewartia malacodendron</i>	<i>Gentiana saponaria</i>
 Morison	<i>Glycine apios</i>
<i>Acrostichum platyneuros</i>	<i>Gnaphalium obtusifolium</i>
<i>Actaea spicata</i> var. <i>alba</i>	<i>Gnaphalium purpureum</i>
<i>Adiantum pedatum</i>	<i>Hedysarum canadense</i>
<i>Ageratum altissimum</i>	<i>Helenium autumnale</i>
<i>Alisma coriifolia</i>	<i>Helianthus divaricatus</i>
<i>Amaryllis atamasca</i>	<i>Helianthus giganteus</i>
<i>Ambrosia artemisiifolia</i>	<i>Helianthus strumosus</i>
<i>Ambrosia elatior</i>	<i>Helonias bullata</i>
<i>Ambrosia trifida</i>	<i>Hibiscus moscheutos</i>
<i>Anchusa virginiana</i>	<i>Houstonia caerulea</i>
<i>Angelica lucida</i>	<i>Hydrophyllum virginianum</i>
<i>Apocynum androsaemifolium</i>	<i>Hyssopus nepetoides</i>
<i>Apocynum cannabinum</i>	<i>Lilium canadense</i>
<i>Aquilegia canadensis</i>	<i>Lithospermum virginianum</i>
<i>Aralia racemosa</i>	<i>Lobelia cardinalis</i>
<i>Arethusa ophioglossoides</i>	<i>Lobelia siphilitica</i>
<i>Aristolochia serpentaria</i>	<i>Lupinus perennis</i>
<i>Asarum canadense</i>	<i>Lycopodium alopecuroides</i>
<i>Asarum virginicum</i>	<i>Monarda ciliata</i>
<i>Aster annuus</i>	<i>Monotropa uniflora</i>
<i>Aster cordifolius</i>	<i>Nepeta virginica</i>
<i>Aster linifolius</i>	<i>Obolaria virginica</i>
<i>Aster puniceus</i>	<i>Onoclea sensibilis</i>
<i>Aster tradescantii</i>	<i>Orchis ciliaris</i>
<i>Aster undulatus</i>	<i>Orobanche virginiana</i>
<i>Baccharis halimifolia</i>	<i>Osteospermum uvedalia</i>
<i>Bartsia coccinea</i>	<i>Oxalis stricta</i>
<i>Bidens bipinnata</i>	<i>Panicum latifolium</i>
<i>Bidens frondosa</i>	<i>Plantago virginica</i>
<i>Bignonia radicans</i>	<i>Poa capillaris</i>
<i>Buphthalmum helianthoides</i>	<i>Polygonum virginianum</i>
<i>Cacalia atriplicifolia</i>	<i>Polypodium bulbiferum</i>
<i>Cacalia porophyllum</i>	<i>Polypodium virginianum</i>
<i>Campanula perfoliata</i>	<i>Pontederia cordata</i>
<i>Carduus virginianus</i>	<i>Pulmonaria virginica</i>
<i>Cenchrus tribuloides</i>	<i>Rudbeckia hirta</i>
<i>Chrysanthemum serotinum</i>	<i>Rudbeckia laciniata</i>
<i>Cicuta maculata</i>	<i>Rudbeckia purpurea</i>
<i>Coix dactyloides</i>	<i>Rudbeckia triloba</i>
<i>Convallaria racemosa</i>	<i>Salvia lyrata</i>
<i>Convallaria stellata</i>	<i>Salvia urticifolia</i>
<i>Coreopsis alternifolia</i>	<i>Sanguisorba canadensis</i>
<i>Coreopsis auriculata</i>	<i>Sarracenia flava</i>
<i>Coreopsis tripteris</i>	<i>Sarracenia purpurea</i>
<i>Cynanchum hirtum</i>	<i>Satureja organoides</i>
<i>Cyperus arundinacea</i>	<i>Satureja virginiana</i>
<i>Dracocephalum virginianum</i>	<i>Scandix procumbens</i>
<i>Elymus canadensis</i>	<i>Scutellaria lateriflora</i>
<i>Eriophorum virginicum</i>	<i>Senecio aureus</i>
<i>Eupatorium altissimum</i>	<i>Serratula spicata</i>
<i>Eupatorium aromaticum</i>	<i>Serratula squarrosa</i>
	<i>Silphium trifoliatum</i>

Sison canadense
Sium rigidus
Smyrnium aureum
Solidago canadensis
Solidago sempervirens
Spiraea trifoliata
Staphylea trifoliata
Thalictrum cornutii
Tradescantia virginiana
Trillium erectum
Uvularia perfoliata
Verbena urticifolia
Yucca filamentosa

Parkinson

Juglans alba
Platanus occidentalis
Thalictrum cornutii

Petiver

Acrostichum areolatum
Asclepias verticillata
Baccharis halimifolia
Eriocaulon decangulare
Glycine comosa
Helianthus angustifolius
Lysimachia quadrifolia
Mitchella repens
Myrica asplenifolia
Ornithogalum hirsutum
Osmunda cinnamomea
Osmunda virginiana
Poa flava
Polypodium virginianum
Polypremum procumbens
Pontederia cordata
Pyrola maculata
Rudbeckia purpurea
Scutellaria hssopifolia
Trifolium comosum

Plukenet

Acer negundo
Acer rubrum
Acrostichum platyneuros
Actaea racemosa
Adiantum pedatum
Aletris farinosa
Amaryllis atamasca
Ambrosia artemisiifolia
Anchusa virginiana
Andromeda mariana
Andromeda paniculata
Anemone quinquefolia
Anemone thalictroides
Apocynum cannabinum
Arabis canadensis
Aralia spinosa
Arethusa bulbosa
Arethusa ophioglossoides

Aristolochia arborescens
Aristolochia serpentaria
Arum dracontium
Asarum virginicum
Asclepias variegata
Asclepias verticillata
Ascyrum crux-andreae
Ascyrum hypericoides
Ascyrum villosum
Aster divaricatus
Aster dumosus
Aster linariifolius
Aster mutabilis
Aster tenuifolius
Azalea lutea
Azalea viscosa
Baccharis halimifolia
Bartsia coccinea
Betula nigra
Bidens bipinnata
Bignonia sempervirens
Buphthalmum helianthoides
Cacalia atriplicifolia
Cacalia porophyllum
Callicarpa americana
Cardamine virginica
Cassia nictitans
Ceanothus americanus
Celastrus bullatus
Celosia paniculata
Cenchrus tribuloides
Cephalanthus occidentalis
Chaerophyllum arborescens
Chelone glabra
Chelone hirsuta
Chrysanthemum serotinum
Chrysogonium virginianum
Cicuta maculata
Claytonia virginica
Clethra alnifolia
Coix dactyloides
Convallaria racemosa
Conyza asteroides
Conyza bifrons
var. flosculosa
Conyza linifolia
Coreopsis alternifolia
Coreopsis auriculata
Coreopsis verticillata
Cornus florida
Cracca virginiana
Crataegus coccinea
Cupressus distichia
Cupressus thyoides
Cyperus arundinacea
Epigaea repens
Eriocaulon decangulare
Eriophorum virginicum
Eryngium aquaticum
Eupatorium aromaticum

<i>Eupatorium coelestinum</i>	<i>Orobanche uniflora</i>
<i>Eupatorium hyssopifolium</i>	<i>Osteospermum uvedalia</i>
<i>Eupatorium perfoliatum</i>	<i>Oxalis violacea</i>
<i>Eupatorium rotundifolium</i>	<i>Panax trifolius</i>
<i>Eupatorium scandens</i>	<i>Parthenium integrifolium</i>
<i>Euphorbia maculata</i>	<i>Phlox divaricata</i>
<i>Euonymus americanus</i>	<i>Phlox ovata</i>
<i>Fagus pumila</i>	<i>Phlox paniculata</i>
<i>Fumaria cucullaria</i>	<i>Phlox pilosa</i>
<i>Galium bermudense</i>	<i>Phlox setacea</i>
<i>Gaura biennis</i>	<i>Phlox subulata</i>
<i>Gerardia flava</i>	<i>Pinus balsamea</i>
<i>Gerardia pedicularia</i>	<i>Pinus strobus</i>
<i>Gerardia purpurea</i>	<i>Pinus taeda</i>
<i>Gleditsia triacanthos</i>	<i>Plantago virginica</i>
<i>Gnaphalium plantaginifolium</i>	<i>Polygonia cruciata</i>
<i>Hamamelis virginiana</i>	<i>Polygonia lutea</i>
<i>Hedysarum canescens</i>	<i>Polygala verticillata</i>
<i>Hedysarum paniculatum</i>	<i>Polygonum arifolium</i>
<i>Helianthus giganteus</i>	<i>Polygonum sagittatum</i>
<i>Helonias bullata</i>	<i>Polygonum scandens</i>
<i>Heuchera americana</i>	<i>Polypodium bulbiferum</i>
<i>Hibiscus virginicus</i>	<i>Pontederia cordata</i>
<i>Hieracium venosum</i>	<i>Prenanthes alba</i>
<i>Horminum virginicum</i>	<i>Prenanthes altissima</i>
<i>Houstonia caerulea</i>	<i>Prunus virginiana</i>
<i>Houstonia purpurea</i>	<i>Ptelea trifoliata</i>
<i>Hypericum setosum</i>	<i>Pulmonaria virginica</i>
<i>Hyssopus nepetoides</i>	<i>Pyrola maculata</i>
<i>Ilex cassine</i>	<i>Quercus prinus</i>
<i>Iris verna</i>	<i>Quercus rubra</i>
<i>Juglans alba</i>	<i>Rhexia mariana</i>
<i>Jussiaea erecta</i>	<i>Rhexia virginica</i>
<i>Kalmia angustifolia</i>	<i>Rhus copallina</i>
<i>Kalmia latifolia</i>	<i>Rhus vernix</i>
<i>Laurus benzoin</i>	<i>Ribes oxyacanthoides</i>
<i>Laurus indica</i>	<i>Robinia pseudoacacia</i>
<i>Laurus sassafras</i>	<i>Rudbeckia hirta</i>
<i>Liriodendron tulipifera</i>	<i>Rudbeckia purpurea</i>
<i>Ludwigia alternifolia</i>	<i>Rudbeckia triloba</i>
<i>Lysimachia quadrifolia</i>	<i>Sarothra gentianoides</i>
<i>Magnolia virginiana</i>	<i>Sarracenia flava</i>
var. <i>glaucia</i>	<i>Sarracenia purpurea</i>
<i>Medeola virginiana</i>	<i>Satureja organoides</i>
<i>Medicago virginica</i>	<i>Satureja virginiana</i>
<i>Menispermum canadense</i>	<i>Saururus cernuus</i>
<i>Mitchella repens</i>	<i>Saxifraga pensylvanica</i>
<i>Monarda ciliata</i>	<i>Schwalbea americana</i>
<i>Monarda punctata</i>	<i>Scirpus retrofractus</i>
<i>Monotropa uniflora</i>	<i>Scutellaria integrifolia</i>
<i>Morus rubra</i>	<i>Serratula glauca</i>
<i>Myosotis virginiana</i>	<i>Serratula praealta</i>
<i>Myrica asplenifolia</i>	<i>Serratula scariosa</i>
<i>Myrica cerifera</i>	<i>Serratula spicata</i>
<i>Nepeta virginica</i>	<i>Silphium helianthoides</i>
<i>Nyssa aquatica</i>	<i>Smilax bona-nox</i>
<i>Obolaria virginica</i>	<i>Smilax herbacea</i>
<i>Oldenlandia uniflora</i>	<i>Smilax lanceolata</i>
<i>Onoclea sensibilis</i>	<i>Smyrnium aureum</i>
<i>Ornithogalum hirsutum</i>	<i>Solanum diphyllosum</i>

<i>Solanum verbascifolium</i>	<i>Diospyros virginiana</i>
<i>Solanum virginianum</i>	<i>Dodecatheon meadia</i>
<i>Solidago flexicaulis</i>	<i>Elymus canadensis</i>
<i>Solidago latifolia</i>	<i>Eupatorium altissimum</i>
<i>Solidago sempervirens</i>	<i>Eupatorium hyssopifolium</i>
<i>Spermacoce tenuior</i>	<i>Eupatorium perfoliatum</i>
<i>Spiraea hypericifolia</i>	<i>Eupatorium purpureum</i>
<i>Spiraea trifoliata</i>	<i>Eupatorium sessilifolium</i>
<i>Thesium umbellatum</i>	<i>Eupatorium trifoliatum</i>
<i>Tilia americana</i>	<i>Euphorbia polygonifolia</i>
<i>Trifolium reflexum</i>	<i>Euonymus americanus</i>
<i>Trillium sessile</i>	<i>Fumaria cucullaria</i>
<i>Triosteum angustifolium</i>	<i>Galium bermudense</i>
<i>Uniola paniculata</i>	<i>Gerardia pedicularia</i>
<i>Urtica dioica</i>	<i>Hedysarum canescens</i>
<i>Vaccinium hispida</i>	<i>Hedysarum marilandicum</i>
<i>Vaccinium stamineum</i>	<i>Helianthus autumnale</i>
<i>Viburnum prunifolium</i>	<i>Houstonia caerulea</i>
<i>Viola palmata</i>	<i>Houstonia purpurea</i>
<i>Viola pedata</i>	<i>Juniperus virginiana</i>
<i>Vitis arborea</i>	<i>Lactuca canadensis</i>
<i>Vitis labrusca</i>	<i>Lechea minor</i>
<i>Vitis vulpina</i>	<i>Lonicera marilandica</i>
<i>Yucca filamentosa</i>	<i>Lycopodium alopecuroides</i>
<i>Magnolia virginiana</i>	
var. <i>glaucoides</i>	
<i>Magnolia virginiana</i>	
var. <i>grisea</i>	
<i>Acrostichum platyneuros</i>	<i>Mimulus ringens</i>
<i>Adiantum pedatum</i>	<i>Obolaria virginica</i>
<i>Amaranthus hybridus</i>	<i>Orchis ciliaris</i>
<i>Ambrosia artemisiifolia</i>	<i>Orchis psycodes</i>
<i>Ambrosia elatior</i>	<i>Orobanche virginiana</i>
<i>Ambrosia trifida</i>	<i>Osmunda cinnamomea</i>
<i>Aristolochia serpentaria</i>	<i>Phlox maculata</i>
<i>Asclepias incarnata</i>	<i>Phlox pilosa</i>
<i>Ascyrum crux-andreae</i>	<i>Pinus balsamea</i>
<i>Ascyrum hypericoides</i>	<i>Pinus taeda</i>
<i>Aster linariifolius</i>	<i>Plantago virginica</i>
<i>Baccharis halimifolia</i>	<i>Plantago incarnata</i>
<i>Bartsia coccinea</i>	<i>Polygala lutea</i>
<i>Betula nigra</i>	<i>Polygala senega</i>
<i>Bignonia capreolata</i>	<i>Polygala verticillata</i>
<i>Bignonia sempervirens</i>	<i>Polygonum virginianum</i>
<i>Buphthalmum helianthoides</i>	<i>Polypodium virginianum</i>
<i>Carduus virginianus</i>	<i>Quercus nigra</i>
<i>Ceanothus americanus</i>	<i>Quercus phellos</i>
<i>Celtis occidentalis</i>	<i>Quercus prinus</i>
<i>Cenchrus tribuloides</i>	<i>Rhus toxicodendron</i>
<i>Cercis canadensis</i>	<i>Robinia pseudoacacia</i>
<i>Chærophyllum arboreescens</i>	<i>Rubus occidentalis</i>
<i>Chelone glabra</i>	<i>Rudbeckia hirta</i>
<i>Chrysanthemum serotinum</i>	<i>Rudbeckia purpurea</i>
<i>Chrysogonum virginianum</i>	<i>Sanguinaria canadensis</i>
<i>Cicuta bulbifera</i>	<i>Sanicula marilandica</i>
<i>Coreopsis alternifolia</i>	<i>Scrophularia marilandica</i>
<i>Coreopsis auriculata</i>	<i>Scutellaria integrifolia</i>
<i>Coreopsis tripteris</i>	<i>Senecio aureus</i>
<i>Cucubalus stellatus</i>	<i>Silphium trifoliatum</i>
<i>Cyperus odoratus</i>	<i>Smilax herbacea</i>
<i>Dioscorea villosa</i>	
<i>Diospyros virginiana</i>	

Smilax lanceolata
Smyrnium aureum
Solidago caesia
Spiraea trifoliata
Trichostema dichotomum
Vaccinium hispidulum
Valeriana locusta
 var. *radiata*
Vitis vulpina

Ray - Banister, 1688
Chelone hirsuta
Clematis viorna
Gerardia flava
Gerardia purpurea
Hieracium venosum
Napaea dioica
Serratula scariosa
Serratula spicata

Ray - Petiver Hort. Sicc.
Asclepias decumbens
Chionanthus virginica
Clematis viorna
Clitoria mariana
Polygala lutea
Trichostema dichotomum
Trifolium biflorum
Viola pedata

Royen
Acer negundo
Adiantum pedatum
Amaryllis atamasca
Ambrosia trifida
Amorpha fruticosa
Andropogon virginicum
Anemone virginiana
Angelica atropurpurea
Angelica lucida
Apocynum androsaemifolium
Aralia racemosa
Aralia spinosa
Arum dracontium
Asclepias incarnata
Asclepias syriaca
Asclepias tuberosa
Aster annuus
Aster cordifolius
Aster dumosus
Aster ericoides
Aster grandiflorus
Aster linifolius
Aster novae-angliae
Aster puniceus
Aster tradescantii
Aster undulatus
Astragalus carolinianus
Baccharis halimifolia
Bidens nivea

Bignonia capreolata
Bignonia sempervirens
Cactus pentagonus
Campanula americana
Campanula perfoliata
Cassia marilandica
Ceanothus americanus
Cephalanthus occidentalis
Cercis canadensis
Chionanthus virginica
Chrysanthemum serotinum
Coix dactyloides
Commelina communis
Commelina erecta
Convallaria racemosa
Coreopsis alternifolia
Coreopsis lanceolata
Coreopsis tripteris
Cornus florida
Crataegus coccinea
Crotalaria alba
Cupressus distichia
Cynanchum hirtum
Cyperus odoratus
Diospyros virginiana
Dracocephalum virginianum
Erythrina herbacea
Eupatorium perfoliatum
Eupatorium purpureum
Eupatorium scandens
Fagus pumila
Fraxinus americana
Fumaria cucullaria
Fumaria sempervirens
Geranium carolinianum
Glycine apios
Glycine frutescens
Gnaphalium purpureum
Gomphrena interrupta
Hedera quinquefolia
Hedysarum canadense
Hedysarum canescens
Hedysarum volubile
Helenium autumnale
Helianthus multiflorus
Helianthus strumosus
Heuchera americana
Hibiscus moscheutos
Hydrophyllum virginianum
Hyssopus nepetoides
Ilex cassine
Juglans nigra
Juniperus virginiana
Laurus nobilis
Laurus borbonica
Laurus sassafras
Limodorum tuberosum
Liriodendron tulipifera
Lobelia cardinalis
Lobelia inflata

Lobelia siphilitica
Lonicera symphoricarpos
Ludwigia alternifolia
Lupinus perennis
Magnolia virginica
Mespileus arbutifolia
Mitella diphylla
Monarda fistulosa
Monarda punctata
Myrica cerifera
Napaea hermaphrodita
Orchis ciliaris
Ornithogalum hirsutum
Osteosperma uvedalia
Phaseolus helvulus
Phlox glaberrima
Phryma leptostachya
Platanus occidentalis
Podophyllum peltatum
Polygonum sagittatum
Polygonum virginianum
Polypodium bulbiferum
Pontederia cordata
Populus balsamifera
Prunus virginiana
Quercus prinus
Quercus rubra
Ranunculus abortivus
Rhus copallina
Rhus radicans
Rhus vernix
Robinia pseudoacacia
Rubus odoratus
Rudbeckia laciniata
Ruellia strepens
Rumex sanguineus
Sanguisorba canadensis
Satureja virginiana
Saururus cernuus
Scutellaria lateriflora
Senecio hieracifolius
Serratula squarrosa
Silene antirrhina
Silphium asteriscus
Silphium trifoliatum
Sison canadense
Smyrnium aureum
Solanum carolinense
Solanum diphyllum
Solanum tomentosum
Solanum virginianum
Solidago canadensis
Solidago flexicaulis
Solidago rigida
Sonchus floridanus
Spermacoce tenuior
Spiraea hypericifolia
Spiraea opulifolia
Spiraea trifoliata
Staphylea trifoliata

Thalictrum cornutii
Tradescantia virginiana
Trichostema dichotomum
Trifolium comosum
Uniola paniculata
Uvularia perfoliata
Verbena hastata
Verbena nodiflora
Verbena urticifolia
Veronica virginica

Tournefort

Amaranthus hypocondriacus
Aster novae-angliae
Astragalus canadensis
Bidens frondosa
Chelone glabra
Circaea lutetiana
 var. *canadensis*
Lactuca canadensis
Lilium canadense
Lobelia kalmii
Menispermum canadense
Mentzelia aspera
Oenothera fruticosa
Oxalis stricta
Polygonum scandens
Rhus toxicodendron
Teucrium canadense

Vaillant

Alsima cordifolia
Bidens nivea
Coreopsis verticillata
Panax quinquefolius
Panax trifolius
Prenanthes alba
Sanicula canadensis
Sonchus floridanus
Viburnum prunifolium

Synonymies for Some of the Vascular Plants Reported for Temperate North America in Linnaeus' First Edition of Species Plantarum

Acrostichum areolatum =
Woodwardia areolata
Acrostichum platyneuros =
Asplenium platyneuron
Acrostichum polypodioides =
Polypodium polypodioides
Actaea racemosa =
Cimicifuga racemosa
Actaea spicata var. *alba* =
Actaea pachypoda
Agrostis virginica =
Sporobolus virginicus
Alisma cordifolia =
Echinodorus cordifolius

<i>Alisma subulata</i> =	<i>Asclepias purpurascens</i>
<i>Sagittaria subulata</i>	
<i>Alsine media</i> =	<i>Asclepias decumbens</i> =
<i>Stellaria media</i>	<i>Asclepias tuberosa</i>
<i>Amaryllis atamasca</i> =	<i>Ascyrum crux-andreae</i> =
<i>Zephyranthes atamasca</i>	<i>Hypericum crux-andreae</i>
<i>Ambrosia elatior</i> =	<i>Ascyrum hypericoides</i> =
<i>Ambrosia artemisiifolia</i>	<i>Hypericum hypericoides</i>
var. <i>elatior</i>	
<i>Ammannia ramosior</i> =	<i>Ascyrum villosum</i> =
<i>Rotala ramosior</i>	<i>Hypericum setosum</i>
<i>Andromeda arborea</i> =	<i>Aster annuus</i> =
<i>Oxydendrum arboreum</i>	<i>Erigeron annuus</i>
<i>Andromeda calyculata</i> =	<i>Aster vernalis</i> =
<i>Chamaedaphne calyculata</i>	<i>Erigeron vernalis</i>
<i>Andromeda mariana</i> =	<i>Avena pensylvanica</i> =
<i>Lyonia mariana</i>	<i>Trisetum pensylvanicum</i>
<i>Andromeda paniculata</i> =	<i>Avena spicata</i> =
<i>Leucothoe racemosa</i>	<i>Trisetum spicatum</i>
<i>Andromeda racemosa</i> =	<i>Azalea lutea</i> =
<i>Leucothoe racemosa</i>	<i>Rhododendron nudiflorum</i>
<i>Andropogon alopecuroides</i> =	<i>Azalea viscosa</i> =
<i>Erianthus alopecuroides</i>	<i>Rhododendron viscosum</i>
<i>Andropogon divaricatum</i> =	<i>Baccharis foetida</i> =
<i>Erianthus alopecuroides</i>	<i>Pluchea foetida</i>
<i>Andropogon hirtum</i> =	<i>Bartsia coccinea</i> =
<i>Hyparrhenia hirta</i>	<i>Castilleja coccinea</i>
<i>Andropogon nutans</i> =	<i>Betonica officinalis</i> =
<i>Sorghastrum nutans</i>	<i>Stachys officinalis</i>
<i>Anemone hepatica</i> =	<i>Bidens pilosa</i> =
<i>Hepatica nobilis</i>	<i>Melanthera nivea</i>
<i>Anemone thalictroides</i> =	<i>Bignonia catalpa</i> =
<i>Anemonella thalictroides</i>	<i>Catalpa bignonioides</i>
<i>Annona triloba</i> =	<i>Bignonia crucigera</i> =
<i>Asimina triloba</i>	<i>Bignonia capreolata</i>
<i>Antirrhinum canadense</i> =	<i>Bignonia radicans</i> =
<i>Linaria canadensis</i>	<i>Campsipedium radicans</i>
<i>Antirrhinum elatine</i> =	<i>Bignonia sempervirens</i> =
<i>Kickxia elatine</i>	<i>Gelsemium sempervirens</i>
<i>Aphanes arvensis</i> =	<i>Briza media</i> =
<i>Alchemilla arvensis</i>	<i>Eragrostis ciliaris</i>
<i>Arbutus uva-ursi</i> =	<i>Bunias orientalis</i> =
<i>Arctostaphylos uva-ursi</i>	<i>Cakile maritima</i>
<i>Arenaria rubra</i> var. <i>marina</i>	<i>Buphthalmum frutescens</i> =
= <i>Spergularia marina</i>	<i>Borrichia frutescens</i>
<i>Arethusa divaricata</i> =	<i>Buphthalmum helianthoides</i> =
<i>Cleistes divaricata</i>	<i>Kallias helianthoides</i>
<i>Arethusa ophioglossoides</i> =	<i>Cacalia atriplicifolia</i> =
<i>Pogonia ophioglossoides</i>	<i>Arnoglossum atriplicifolium</i>
<i>Arenaria maritima</i> =	<i>Cacalia porophyllum</i> =
<i>Senecio pseudoarnica</i>	<i>Porophyllum ruderale</i>
<i>Arum draconium</i> =	<i>Cacalia suaveolens</i> =
<i>Arisaema draconium</i>	<i>Hasteola suaveolens</i>
<i>Arum triphyllum</i> =	<i>Cactus opuntia</i> =
<i>Arisaema triphyllum</i>	<i>Opuntia vulgaris</i>
<i>Arum virginicum</i> =	<i>Cactus pentagonus</i> =
<i>Peltandra virginica</i>	<i>Cereus pentagonus</i>
<i>Arundo phragmites</i> =	<i>Campanula perfoliata</i> =
<i>Phragmites australis</i>	<i>Triodanis perfoliata</i>
<i>Asclepias amoena</i> =	<i>Cardamine virginica</i> =
	<i>Sibara virginica</i>

<i>Carduus altissimus</i> =	<i>Cracca virginiana</i> =
<i>Cirsium altissimum</i>	<i>Tephrosia virginiana</i>
<i>Carduus virginianus</i> =	<i>Crotalaria alba</i> =
<i>Cirsium virginianum</i>	<i>Baptisia alba</i>
<i>Carpinus ostrya</i> =	<i>Crotalaria perfoliata</i> =
<i>Ostrya virginiana</i>	<i>Baptisia perfoliata</i>
<i>Celastrus bullatus</i> =	<i>Cucubalus stellatus</i> =
<i>Celastrus scandens</i>	<i>Silene stellata</i>
<i>Celosia paniculata</i> =	<i>Cupressus distichia</i> =
<i>Iresine paniculata</i>	<i>Taxodium distichium</i>
<i>Chaerophyllum arborescens</i> =	<i>Cupressus thyoides</i> =
<i>Aralia spinosa</i>	<i>Chamaecyparis thyoides</i>
<i>Chelidonium glaucium</i> =	<i>Cynanchum suberosum</i> =
<i>Glaucium flavum</i>	<i>Matelea suberosa</i>
<i>Chelone hirsuta</i> =	<i>Cynosurus aegyptius</i> =
<i>Penstemon hirsutus</i>	<i>Dactyloctenium aegyptium</i>
<i>Chelone penstemon</i> =	<i>Cyperus arundinacea</i>
<i>Penstemon laevigatus</i>	<i>Dulichium arundinaceum</i>
<i>Chenopodium anthelminticum</i> =	<i>Dactylis cynosuroides</i> =
<i>Chenopodium ambrosioides</i>	<i>Spartina cynosuroides</i>
<i>Chironia angularis</i> =	<i>Datiscia hirta</i> =
<i>Sabatia angularis</i>	<i>Rhus hirta</i>
<i>Chironia campanulata</i> =	<i>Dianthera americana</i> =
<i>Sabatia campanulata</i>	<i>Justicia americana</i>
<i>Chironia dodecandra</i> =	<i>Dolichos polystachyus</i> =
<i>Sabatia dodecandra</i>	<i>Phaseolus polystachyus</i>
<i>Chrysosoma graminifolia</i> =	<i>Dolichos regularis</i> =
<i>Euthamia graminifolia</i>	<i>Galactia regularis</i>
<i>Cissampelos smilacina</i> =	<i>Dracocephalum virginianum</i> =
<i>Menispermum canadense</i>	<i>Physostegia virginiana</i>
<i>Cistus canadensis</i> =	<i>Dracontium foetidum</i> =
<i>Helianthemum canadense</i>	<i>Symplocarpus foetidus</i>
<i>Clinopodium incanum</i> =	<i>Elymus hystrix</i> =
<i>Pycnanthemum incanum</i>	<i>Hystrix patula</i>
<i>Clitoria virginiana</i> =	<i>Erigeron camphoratum</i> =
<i>Centrosema virginiana</i>	<i>Pluchea camphorata</i>
<i>Coix dactyloides</i> =	<i>Erigeron canadense</i> =
<i>Tripsacum dactyloides</i>	<i>Conyzza canadensis</i>
<i>Convallaria polygonatum</i> =	<i>Eupatorium altissimum</i> =
<i>Polygonatum officinale</i>	<i>Ageratina altissima</i>
<i>Convallaria racemosa</i> =	<i>Eupatorium aromaticum</i> =
<i>Smilacina racemosa</i>	<i>Ageratina aromaticata</i>
<i>Convallaria stellata</i> =	<i>Eupatorium coelestinum</i> =
<i>Smilacina stellata</i>	<i>Conoclinium coelestinum</i>
<i>Convolvulus carolinus</i> =	<i>Eupatorium scandens</i> =
<i>Ipomoea trichocarpa</i>	<i>Mikania scandens</i>
<i>Convolvulus panduratus</i> =	<i>Eupatorium trifoliatum</i> =
<i>Ipomoea pandurata</i>	<i>Eupatorium purpureum</i>
<i>Convolvulus repens</i> =	<i>Euphorbia portulacoides</i> =
<i>Calystegia sepium</i>	<i>Euphorbia ipecacuanhae</i>
<i>Convolvulus spithameus</i> =	<i>Fagus pumila</i> =
<i>Calystegia spithamea</i>	<i>Castanea pumila</i>
<i>Conzya asteroides</i> =	<i>Ferula canadensis</i> =
<i>Sericocarpus asteroides</i>	<i>Ligusticum canadense</i>
<i>Conzya linifolia</i> =	<i>Fumaria cucullaria</i> =
<i>Sericocarpus linifolius</i>	<i>Dicentra cucullaria</i>
<i>Coreopsis alternifolia</i> =	<i>Fumaria sempervirens</i> =
<i>Verbesina alternifolia</i>	<i>Corydalis sempervirens</i>
<i>Coreopsis angustifolia</i> =	<i>Gentiana quinquefolia</i> =
<i>Helianthus angustifolia</i>	<i>Gentianella quinquefolia</i>

<i>Gerardia flava</i> =	<i>Helleborus trifolius</i> =
<i>Aureolaria flava</i>	<i>Coptis trifolia</i>
<i>Gerardia pedicularia</i> =	<i>Hibiscus palustris</i> =
<i>Aureolaria pedicularia</i>	<i>Hibiscus moscheutos</i>
<i>Gerardia purpurea</i> =	<i>Hibiscus virginicus</i> =
<i>Agalinis purpurea</i>	<i>Kosteletzkyia virginica</i>
<i>Glycine apios</i> =	<i>Hippophae canadensis</i> =
<i>Apis americana</i>	<i>Shepherdia canadensis</i>
<i>Glycine bracteata</i> =	<i>Holcus laxus</i> =
<i>Amphicarpa bracteata</i>	<i>Uniola laxa</i>
<i>Glycine comosa</i> =	<i>Holcus striatus</i> =
<i>Amphicarpa bracteata</i>	<i>Sacciolepis striata</i>
<i>Glycine frutescens</i> =	<i>Holosteum succulentum</i> =
<i>Wisteria frutescens</i>	<i>Honkenya peploides</i>
<i>Glycine tomentosa</i> =	<i>Horminum virginicum</i> =
<i>Rhynchosia tomentosa</i>	<i>Salvia lyrata</i>
<i>Gnaphalium margaritaceum</i> =	<i>Hyoseris virginica</i> =
<i>Anaphalis margaritacea</i>	<i>Krigia virginica</i>
<i>Gnaphalium plantaginifolium</i> =	<i>Hypericum lasianthus</i> =
<i>Antennaria plantagini- folia</i>	<i>Gordonia lasianthus</i>
<i>Gnaphalium purpureum</i> =	<i>Hyssopus nepetoides</i> =
<i>Gamochaeta purpurea</i>	<i>Agastache nepetoides</i>
<i>Gomphrena interrupta</i> =	<i>Ipomoea nyctelea</i> =
<i>Froelichia interrupta</i>	<i>Ellisia nyctelea</i>
<i>Gratiola dubia</i> =	<i>Ipomoea tannifolia</i> =
<i>Lindernia dubia</i>	<i>Jacquemontia tannifolia</i>
<i>Guilandina dioica</i> =	<i>Juglans alba</i> =
<i>Gymnocladus dioica</i>	<i>Carya tomentosa</i>
<i>Hedera quinquefolia</i> =	<i>Juncus campestris</i> =
<i>Parthenocissus quinque- folia</i>	<i>Luzula campestris</i>
<i>Hedysarum canadense</i> =	<i>Jussiaea erecta</i> =
<i>Desmodium canadense</i>	<i>Ludwigia erecta</i>
<i>Hedysarum canescens</i> =	<i>Laurus aestivalis</i> =
<i>Desmodium canescens</i>	<i>Litsea aestivalis</i>
<i>Hedysarum frutescens</i> =	<i>Laurus benzoin</i> =
<i>Lespedeza violacea</i>	<i>Lindera benzoin</i>
<i>Hedysarum hirtum</i> =	<i>Laurus borbonia</i> =
<i>Lespedeza hirta</i>	<i>Persea borbonia</i>
<i>Hedysarum marilandicum</i> =	<i>Laurus indica</i> =
<i>Desmodium marilandicum</i>	<i>Persea indica</i>
<i>Hedysarum nudiflorum</i> =	<i>Laurus sassafras</i> =
<i>Desmodium nudiflorum</i>	<i>Sassafras albidum</i>
<i>Hedysarum paniculatum</i> =	<i>Laurus winterana</i> =
<i>Desmodium paniculatum</i>	<i>Canella winterana</i>
<i>Hedysarum repens</i> =	<i>Lechea major</i> =
<i>Lespedeza repens</i>	<i>Helianthemum canadense</i>
<i>Hedysarum violaceum</i> =	<i>Leontodon thalictroides</i> =
<i>Lespedeza violacea</i>	<i>Caulophyllum thalictro- ides</i>
<i>Hedysarum virginicum</i> =	<i>Leontodon dandelion</i> =
<i>Lespedeza virginica</i>	<i>Krigia dandelion</i>
<i>Hedysarum viridiflorum</i> =	<i>Lilium camschatcense</i> =
<i>Desmodium viridiflorum</i>	<i>Fritillaria camschatc- ensis</i>
<i>Hedysarum volubile</i> =	<i>Limodorum tuberosum</i> =
<i>Galactia volubilis</i>	<i>Calopogon tuberosus</i>
<i>Helianthus laevis</i> =	<i>Liquidambar peregrina</i> =
<i>Bidens laevis</i>	<i>Comptonia peregrina</i>
<i>Helianthus multiflorus</i> =	<i>Lithospermum virginianum</i> =
<i>Helianthus decapetalus</i>	<i>Onosmodium virginianum</i>

<i>Lonicera marilandica</i> =	<i>Cynoctonum mitreola</i>
<i>Spigelia marilandica</i>	
<i>Lonicera symphoricarpos</i> =	<i>Ophrys liliifolia</i> =
<i>Symporicarpos orbiculata</i>	<i>Liparis linifolia</i>
<i>Lycopodium apodum</i> =	<i>Orchis ciliaris</i> =
<i>Selaginella apoda</i>	<i>Platanthera ciliaris</i>
<i>Lycopsis virginica</i> =	<i>Orchis flava</i> =
<i>Myosotis verna</i>	<i>Platanthera flava</i>
<i>Lythrum petiolatum</i> =	<i>Orchis psycodes</i> =
<i>Cuphea petiolata</i>	<i>Platanthera psycodes</i>
<i>Magnolia virginiana</i>	<i>Orchis spectabilis</i> =
var. <i>acuminata</i> =	<i>Gallearis spectabilis</i>
<i>Magnolia acuminata</i>	<i>Ornithogalum bivale</i> =
<i>Magnolia virginiana</i>	<i>Allium bivale</i>
var. <i>foetida</i> =	<i>Ornithogalum hirsutum</i>
<i>Magnolia grandiflora</i>	<i>Hypoxis hirsuta</i>
<i>Magnolia virginiana</i>	<i>Orbanche virginiana</i> =
var. <i>glauca</i> =	<i>Epifagus virginiana</i>
<i>Magnolia virginiana</i>	<i>Osmunda virginiana</i> =
<i>Magnolia virginiana</i>	<i>Botrychium virginianum</i>
var. <i>grisea</i> =	<i>Osteospermum uvedalia</i> =
<i>Magnolia virginiana</i>	<i>Smallanthus uvedalia</i>
<i>Magnolia virginiana</i>	<i>Oxalis longiflora</i> =
var. <i>tripetala</i> =	<i>Oxalis violacea</i>
<i>Magnolia tripetala</i>	<i>Pancratium carolinianum</i> =
<i>Malva caroliniana</i> =	<i>Hymenocallis caroliniana</i>
<i>Modiola caroliniana</i>	<i>Panicum clandestinum</i> =
<i>Medicago virginica</i> =	<i>Dichanthelium clandestinum</i>
<i>Lespedeza virginica</i>	<i>Panicum crusgalli</i> =
<i>Melissa nepeta</i> =	<i>Echinochloa crusgalli</i>
<i>Calamintha nepeta</i>	<i>Panicum dichotomum</i> =
<i>Melissa pulegioides</i> =	<i>Dichanthelium dichotomum</i>
<i>Hedeoma pulegioides</i>	<i>Panicum dissectum</i> =
<i>Menispermum carolinum</i> =	<i>Paspalum dissectum</i>
<i>Cocculus carolinus</i>	<i>Panicum filiforme</i> =
<i>Menispermum virginicum</i> =	<i>Digitaria filiformis</i>
<i>Cocculus carolinus</i>	<i>Panicum glaucum</i> =
<i>Mentha spicata</i> var. <i>viridis</i> =	<i>Setaria glauca</i>
<i>Mentha spicata</i>	<i>Panicum italicum</i> =
<i>Mespilus arbutifolia</i> =	<i>Setaria italicica</i>
<i>Aronia arbutifolia</i>	<i>Panicum latifolium</i> =
<i>Mespilus canadensis</i> =	<i>Dichanthelium latifolium</i>
<i>Amelanchier canadensis</i>	<i>Panicum sanguinale</i> =
<i>Monarda ciliata</i> =	<i>Digitaria sanguinalis</i>
<i>Blephilia ciliata</i>	<i>Phalaris oryzoides</i> =
<i>Monotropa hypopithys</i> =	<i>Leersia oryzoides</i>
<i>Hypopithys monotropa</i>	<i>Phaseolus helvulus</i> =
<i>Myosotis virginiana</i> =	<i>Strophostyles helvola</i>
<i>Hackelia virginiana</i>	<i>Phlox ovata</i> =
<i>Myrica asplenifolia</i> =	<i>Ruellia carolinensis</i>
<i>Comptonia cerifera</i>	<i>Phlox setacea</i> =
<i>Myrica cerifera</i> =	<i>Phlox subulata</i> var.
<i>Comptonia cerifera</i>	<i>setacea</i>
<i>Napaea hermaphrodita</i> =	<i>Pinus balsamea</i> =
<i>Sida hermaphrodita</i>	<i>Abies balsamea</i>
<i>Nymphaea lutea</i> =	<i>Pistacia simaruba</i> =
<i>Nuphar luteum</i>	<i>Bursera simaruba</i>
<i>Nymphaea nelumbo</i> =	<i>Poa capillaris</i> =
<i>Nelumbo lutea</i> (ours)	<i>Eragrostis capillaris</i>
<i>Ophiorrhiza mitreola</i> =	<i>Poa flava</i> =

<i>Tridens flavus</i>	<i>Schoenus glomeratus</i> =
<i>Podophyllum diphylloides</i> =	<i>Rhyschospora glomerata</i>
<i>Jeffersonia diphylloides</i>	
<i>Polemonium dubium</i> =	<i>Scirpus retrofractus</i> =
<i>Phacelia dubia</i>	<i>Cyperus retrofractus</i>
<i>Polygala viridescens</i> =	<i>Scirpus spadiceus</i> =
<i>Polygala sanguinea</i>	<i>Fimbristylis spadicea</i>
<i>Polygonum articulatum</i> =	<i>Scutellaria hyssopifolia</i> =
<i>Polygonella articulata</i>	<i>Scutellaria integrifolia</i>
<i>Polypodium bulbiferum</i> =	<i>Senecio hieracifolius</i> =
<i>Cystopteris bulbifera</i>	<i>Erechitites hieracifolia</i>
<i>Polypodium lonchitis</i> =	<i>Serratula glauca</i> =
<i>Polystichum lonchitis</i>	<i>Vernonia glauca</i>
<i>Polypodium marginale</i> =	<i>Serratula noveboracensis</i> =
<i>Dryopteris marginalis</i>	<i>Vernonia noveboracensis</i>
<i>Polypodium noveboracense</i> =	<i>Serratula praealta</i> =
<i>Thelypteris noveboracensis</i>	<i>Vernonia noveboracensis</i>
<i>Polypodium phegopteris</i> =	<i>Serratula scariosa</i> =
<i>Thelypteris phegopteris</i>	<i>Liatris scariosa</i>
<i>Prinos glaber</i> =	<i>Serratula spicata</i> =
<i>Ilex glabra</i>	<i>Liatris spicata</i>
<i>Prinos verticillatus</i> =	<i>Serratula squarrosa</i> =
<i>Ilex verticillata</i>	<i>Liatris squarrosa</i>
<i>Pteris atropurpurea</i> =	<i>Sida abutilon</i> =
<i>Pellaea atropurpurea</i>	<i>Abutilon theophrastii</i>
<i>Pulmonaria virginica</i> =	<i>Sida crispa</i> =
<i>Mertensia virginica</i>	<i>Malva crispa</i>
<i>Pyrus coronaria</i> =	<i>Sigesbeckia occidentalis</i> =
<i>Malus coronaria</i>	<i>Verbesina occidentalis</i>
<i>Queria canadensis</i> =	<i>Silphium helianthoides</i> =
<i>Paronychia canadensis</i>	<i>Kallias helianthoides</i>
<i>Renealmia usneoides</i> =	<i>Silphium solidaginoides</i> =
<i>Tillandsia usneoides</i>	<i>Kallias helianthoides</i>
<i>Rhianthus virginica</i> =	<i>Sison canadense</i> =
<i>Aureolaria virginica</i>	<i>Cryptotaenia canadensis</i>
<i>Rhus radicans</i> =	<i>Sisymbrium nasturtium-aquaticum</i> =
<i>Toxicodendron radicans</i>	<i>Nasturtium officinale</i>
<i>Rhus toxicodendron</i> =	<i>Sium rigidius</i> =
<i>Toxicodendron quercifolium</i>	<i>Oxypolis rigidus</i>
<i>Rhus vernix</i> =	<i>Smilax caduca</i> =
<i>Toxicodendron vernix</i>	<i>Smilax rotundifolia</i>
<i>Rudbeckia oppositifolia</i> =	<i>Smyrnium aureum</i> =
<i>Kallias helianthoides</i>	<i>Zizia aurea</i>
<i>Rudbeckia purpurea</i> =	<i>Smyrnium integerrimum</i> =
<i>Echinacea purpurea</i>	<i>Taenidia integerrima</i>
<i>Sagina virginica</i> =	<i>Solidago altissima</i> =
<i>Bartonia virginica</i>	<i>Solidago canadensis</i>
<i>Salsola prostrata</i> =	<i>Solidago lateriflora</i> =
<i>Kochia prostrata</i>	<i>Aster lateriflorus</i>
<i>Sarothra gentianoides</i> =	<i>Solidago latifolia</i> =
<i>Hypericum gentianoides</i>	<i>Solidago flexicaulis</i>
<i>Satureja origanoides</i> =	<i>Sonchus floridanus</i> =
<i>Cunila origanoides</i>	<i>Lactuca floridana</i>
<i>Satureja virginiana</i> =	<i>Sophora tinctoria</i> =
<i>Pycnanthemum virginianum</i>	<i>Baptisia tinctoria</i>
<i>Scandix cerefolium</i> =	<i>Spiraea aruncus</i> =
<i>Anthriscus cerefolium</i>	<i>Aruncus sylvester</i>
<i>Scandix procumbens</i> =	<i>Spiraea opulifolia</i> =
<i>Chaerophyllum procumbens</i>	<i>Physocarpus opulifolius</i>
	<i>Spiraea trifoliata</i> =

Porteranthus trifoliatus
Statice armeria = *Armeria maritima*
Swertia difformis = *Sabatia difformis*
Teucrium chamaepitys = *Ajuga chamaepitys*
Teucrium virginicum = *Teucrium canadense*
Thapsia trifoliata = *Thaspium trifoliatum*
Thesium umbellatum = *Comandra umbellata*
Tragopogon virginicum = *Krigia virginica*
Trifolium biflorum = *Stylosanthes biflora*
Uniola spicata = *Distichlis spicata*
Urtica canadensis = *Laportea canadensis*
Urtica cylindrica = *Boehmeria cylindrica*
Urtica divaricata = *Laportea canadensis*
Urtica pumila = *Pilea pumila*
Vaccinium frondosum = *Gaylussacia frondosa*
Vaccinium hispidulum = *Gaultheria hispida*
Vaccinium ligustrinum = *Lyonia ligustrina*
Vaccinium mucronatum = *Nemopanthus mucronata*
Valeriana locusta var. *radiata* = *Valerianella radiata*
Veratrum luteum = *Chamaelirium luteum*
Verbena nodiflora = *Lippia nodiflora*
Verbena spuria = *Verbena officinalis*
Verbesina alba = *Eclipta alba*
Veronica marilandica = *Polypremum procumbens*
Veronica virginica = *Veronicastrum virginicum*
Viscum rubrum = *Phoradendron rubrum*
Viscum terrestris = *Lysimachia terrestris*
Vitis arborea = *Ampelopsis arborea*
Vitis laciniosa = *Vitis vulpina*

From the raw data above, it can be noted that Linnaeus

mentions 889 species from temperate North America. Of that number 13 are varieties leaving a total of 876 species. Two of the varieties, *Magnolia virginiana* var. *glaucia* and *Solanum nigrum* var. *vulgare*, can be considered equivalent to the modern declarations of var. *virginiana* and var. *nigrum* in each instance. One species, *Ornithogalum canadense*, is based solely upon South African material and Linnaeus misnamed it. Most likely he meant "capense".

Linnaeus gives habitat references for nearly all of his species. In the above review, 108 are referred to "America". This was variously defined by Linnaeus to include North America or the Americas, meaning both North and South America. Those species which are strictly stated by Linnaeus to be only from South America (but have synonymies based on North American elements) are not included. Canada is given for 162 species, while 80 (including five varieties of *Magnolia virginiana*) are given as occurring in the Carolinas. Maryland is credited with a total of 18 species with Pennsylvania (or Philadelphia) given for 44 species. Linnaeus assigns four species to Florida, two to Mississippi, five to New York, and one each to New England and New Jersey. The largest number of species are referred to Virginia. He refers 421 species and varieties to Virginia.

To be sure Linnaeus often referred a species to more than a single area, and thus the total is greater than the number of species considered, by Linnaeus, to be strictly from these areas. Even so, fully 47% of the species considered by Linnaeus to be from temperate North America (even if not stated as such) were considered to occur in Virgi-

nia. Only 18% of the plants were mentioned as being from Canada, while 12% came from America.

A number of temperate North American species were mentioned in Linnaeus' first edition of *Species plantarum* in synonymy, but the geographic range given by him did not include an area within temperate North America. Linnaeus gives the range of 47 species as occurring somewhere in the New World but not specifically in the temperate region. For 86 species Linnaeus gives the range as occurring in both temperate North America and somewhere else in the World. This usually refers to species which Linnaeus believed occurred in both Europe and the Americas. In 79 instances, synonyms based on temperate North American species are cited, but the geographical range does not even mention the New World or temperate North America. Mostly, Linnaeus is referring to weed species gathered in temperate North America prior to 1753.

Linnaeus named 14 species for America, 37 for Canada, 10 for the Carolinas, nine for Maryland, four for New York, five for Pennsylvania or Philadelphia, and 63 for Virginia. He named one species each for Florida and New England.

Linnaeus named some North American species for early explorers. Three species were named for Peter Kalm (*Hieracium kalmii*, *Hypericum kalmianum* and *Lobelia kalmii*), and one each for Clayton (*Osmunda claytoniana*) and Tradescant (*Aster tradescantii*). He did name species for others, of which three may be mentioned: *Hieracium gronovii*, *Lobelia cliffortiana* and *Thalictrum cornutii*.

EVALUATION OF SPECIES PUBLISHED IN SPECIES PLANTARUM

In attempting to evaluate the contents of Carl Linnaeus' first edition of *Species plantarum* for those species of vascular plants he attributes to temperate North America it is necessary to consider the conditions under which Linnaeus labored, and his abilities to resolve problems long associated with efforts to produce a world's flora. To begin, it is useful to start with the status of the collections available to him, and then turn to the literature already published which Linnaeus had access to. As shall become obvious, the two are not entirely mutually inclusive.

Over Linnaeus' life time he gathered a herbarium of some 16,000 specimens. Today specimens once in his possession are located in England, Sweden and France. The gathering of plants with the intention of making permanent collections of dried specimens began in the early 1500s and was a well established practice when Linnaeus began his own botanical explorations on an expedition to Lapland in 1732. The older herbaria consisted largely of bound volumes, or *hortus siccus*, into which specimens were glued in a predetermined order. Typically the plant specimens were arranged according to some system of classification, according to geographical location, or even randomly. A few workers maintained their collections loose between sheets of brown paper. In either cases, notations as to collector, place of origin, or even the scientific name may or may not be affixed to the specimen. In the better collections, such data were retained. Unfortunately, few such collections exist. As

the herbarium developed, more and more workers realized the inherent difficulties of the inflexibly of bound volumes and moved to individual sheets. As workers had done with the bound volumes, often several species were placed on a single sheet, but in time, a single specimen was placed on a sheet so as to allow absolute freedom in rearranging the entire collection as the newer systems of classifications were developed.

Most of the herbaria made prior to the Linnaean era were arranged in bound volumes. Linnaeus departed from this practice, as did Sherard and Dillenius for example. Unlike his Oxford colleagues who placed one or more collections on the same sheet, Linnaeus usually glued a single collection to a sheet. None of these men was consistent in their annotations, although Sherard, Dillenius and Gronovius in Holland were far more consistent in this practice than Linnaeus. While most workers wrote onto a label who collected each specimen, and from where it came, this was not at all a consistent practice. Dale and Du Bois were far more consistent in this practice than most. Petiver, in spite of his chaotic collections, maintained good records but apparently was of the practice of giving away specimens. To record what he had seen he would add the collector and his data to preexisting labels compounding the identification of many his specimens. Sloane, Ray, and Plukenet were not at all consistent in their herbarium skills. Sloane kept only the briefest records of his own collections, and retained almost none for the specimens he received from others. Ray failed to retain nearly all of the data he might have received and was constantly rear-

ranging his collections to fit into his latest scheme of classification. As for Plukenet, he kept some records, but for the most part, his bound volumes of dried plants are remarkably void of collecting data. This is somewhat overcome by the identifications associated with each specimen (when annotated) as these can be used to trace a collection to a particular collector.

For Linnaeus, few of the extant collections made by other botanists prior to 1753 were consulted. He examined the collection made by Joachim Burser, but these were only of Old World species. Linnaeus also examined some of the collections in the Sherardian and Dillenian herbaria at Oxford University, but the extent to which he reviewed these holdings is unknown. Linnaeus did not see the vast holdings owned by Sir Hans Sloane when he visited England in 1736. Thus, the rich array of specimens gathered by Plukenet, Petiver, Sloane and many others were not studied by him. Likewise, the large Catesby collections ultimately obtained by Sloane were not examined in London although Linnaeus certainly saw duplicates sent to Sherard and Dillenius at Oxford. Linnaeus states that he saw the collections of Tournefort, Vaillant and Jussieu in France, but it is unlikely that he spent much time evaluating their contents. Linnaeus also visited Phillip Miller in London and Peter Collinson, but it is not known to what extent Linnaeus examined their gardens or reviewed their herbaria. Most likely, any such examination was highly superfluous. However, in many instances, Linnaeus received specimens from these men, or exchanged plant collections with them so that Linnaeus had access to many of their more unique species.

During the Linnaean years abroad in Holland he worked closely with three men and was able to examine not only their libraries and gardens, but in some cases, exotic collections of dried herbarium material. With the assistance of George Clifford, Linnaeus was able to study the Clifford garden in great detail, make herbarium specimens, and to prepare an illustrated volume treating the species in and around the Clifford estate. This book was published in 1738. The specimens remained with Clifford and eventually came to the British Museum (Natural History) in London where they may be examined today. Thus, when Linnaeus was preparing *Species plantarum* in 1751 and 1752, he did not have direct access to these specimens.

Linnaeus also aided Adriaan van Royen, a professor of botany at Leyden. His book, *Florae leydensis prodromus*, was published in 1740. It is unclear what role Linnaeus played in the production of this work, but it is certain that Linnaeus must have aided him in the assignment of synonymies and the literature he cites.

The third man was Gronovius, an amateur botanist, with a large library and herbarium. In assisting Gronovius with his *Flora virginica*, Linnaeus was able to examine many of the temperate North American collections of John Clayton. It is likely that Linnaeus saw most of the species reported in the first part of that work (published in 1739), but it is uncertain to what extent Linnaeus examined Clayton material cited in the second part (published in 1743). Gronovius sent a number of Clayton specimens to Linnaeus, and these are extant in the Linnaean Herbarium in London.

Significant collections of vascular plants came to Linnaeus from a number of sources. For temperate North America the most significant holdings available to Linnaeus while writing *Species plantarum* were those provided by Peter Kalm. Linnaeus heavily relied upon these specimens to determine species circumscriptions. In some cases, the Virginia specimens Linnaeus examined earlier proved to be somewhat different from the specimens found by Kalm, and Linnaeus was not in a position to differentiate between them inasmuch as he no longer had access to Clayton material.

Of the two collectors, Clayton and Kalm, it can be seen from the listings given above that Linnaeus cited John Clayton material more frequently than he did that gathered by Peter Kalm. In part this is due to the greater number of species found by Clayton compared to Kalm, but an additional factor is that many of the Kalm collections in the Linnaean Herbarium in London likely are not identified as such and cannot be presently assigned to him. Continued studies of the herbarium holdings available to Linnaeus will likely result in an increase in the number of Kalm specimens. This can be accomplished, in part, by examining the Kalm collections found elsewhere. It is interesting to note that when one compares the Kalm species with those cited by Linnaeus as originating from Canada or Pennsylvania there is a close relationship. In some instances, the Canada reference is based on a *Cornuti polynomial* or some other name that clearly establishes Canada as the source of the name.

In a number of instances, Linnaeus saw both Clayton and Kalm material of plants which

he took to represent the same species. For the most part, Linnaeus cites both Virginia and Canada as the sources of the species, but in some instances he gives only Virginia. In the following listing, species of temperate North American vascular plants are given which the available evidence indicates were collected by both men. In addition, the geographic source(s) of the species is given only as they are applicable to those parts of temperate North America where the two men botanized (A= America; C= Canada; NY= New York; P= Pennsylvania; V= Virginia; N= none of the above; X= no geographic data given):

Acalypha virginica - V
Acer negundo - V
Acer rubrum - P, V
Adiantum pedatum - C, V
Agrostis virginica - V
Andromeda mariana - V
Andromeda paniculata - V
Andropogon nutans - V
Anemone thalictroides - C, V
Anemone virginiana - V
Angelica sylvestris - N
Antirrhinum canadense - C, V
Apocynum cannabinum - C, V
Arabis canadensis - A
Arabis lyrata - C
Aralia spinosa - V
Arenaria rubra var. *marina* - N
Arethusa bulbosa - C, V
Arethusa ophioglossoides - C, V
Aristolochia serpentaria - V
Asarum canadense - C
Asclepias nivea - V
Aster concolor - V
Astragalus canadensis - C, V
Azalea viscosa - V
Bartsia coccinea - NY, V
Briza eragrostis - N
Cacalia atriplicifolia - C, V
Ceanothus americanus - V
Celtis occidentalis - V
Cenchrus tribuloides - V
Cephalanthus occidentalis - A
Cercis canadensis - V
Chaerophyllum arborescens - V
Chelone glabra - C, V
Cicuta bulbifera - C, V

Cicuta maculata - V
Claytonia virginica - V
Convolvulus spithameus - V
Cornus florida - V
Cracca virginiana - C, V
Crataegus coccinea - C, V
Crataegus crus-galli - X
Crataegus tomentosa - V
Crotalaria sagittalis - V
Cucubalus stellatus - C, V
Cuscuta americana - V
Dianthera americana - V
Diospyros virginiana - A
Dracontium foetidum - V
Euphorbia corollata - C, V
Euphorbia ipecacuanhae - C, V
Euphorbia polygonifolia - C, V
Euonymus americanus - V
Fagus pumila - A
Geranium carolinianum - V
Gerardia flava - C, V
Gerardia pedicularia - C, V
Gerardia purpurea - C, V
Glechoma triacanthos - V
Glycine apios - V
Glycine bracteata - V
Glycine comosa - V
Gnaphalium obtusifolium - P, V
Gnaphalium plantaginifolium - V
Gnaphalium purpureum - P, V
Gratiola virginiana - V
Hamamelis virginiana - V
Hedera quinquefolia - C
Hedysarum hirtum - V
Hedysarum violaceum - V
Heuchera americana - V
Hibiscus palustris - C, V
Hieracium gronovii - P, V
Houstonia caerulea - V
Houstonia purpurea - V
Hydrangea arborescens - V
Hydrocotyle umbellata - A
Hyoseris virginiana - V
Hypericum canadense - C
Hypericum mutilum - C, V
Iris verna - V
Juglans alba - V
Laurus sassafras - V
Limodorum tuberosum - A
Liquidambar styraciflua - V
Liriodendron tulipifera - A
Lobelia cliffortiana - C, V
Ludwigia alternifolia - V
Lupinus perennis - V
Medeola virginiana - V
Melanthium virginicum - V
Melissa pulegioides - C, V
Menispermum canadense - C, V
Mespilus canadensis - C, V

Mollugo verticillata - V
Monotropa uniflora - C, V
Nyssa aquatica - A
Oenothera fruticosa - V
Ophrys liliifolia - C, V
Orchis psycodes - C
Ornithogalum hirsutum - C, V
Orobanche virginiana - V
Osmunda regalis - V
Osmunda virginiana - A
Oxalis stricta - V
Oxalis violacea - C, V
Panax quinquefolius - C, P, V
Panicum dichotomum - V
Pinus taeda - C, V
Plantago virginica - V
Poa capillaris - C, V
Polygala verticillata - V
Polygala viridescens - V
Pontederia cordata - V
Prenanthes alba - P, V
Prinos verticillatus - V
Pteris atropurpurea - V
Pulmonaria virginica - V
Pyrola maculata - A
Quercus alba - V
Quercus nigra - A
Quercus phellos - A
Quercus prinus - A
Quercus rubra - V
Ranunculus abortivus - C, V
Rhexia virginica - V
Rhus glabra - A
Rhus radicans - C, V
Rhus toxicodendron - C, V
Rhus vernix - A
Salvia lyrata - V
Sanguinaria canadensis - A
Sarothra gentianoides - P, V
Satureja origanoides - V
Saxifraga nivalis - C, V
Saxifraga pensylvanica - C, P, V
Schoenus glomeratus - V
Scirpus capitatus - V
Scutellaria hyssopifolia - V
Scutellaria integrifolia - C, V
Serratula spicata - A
Silene virginica - V
Sison canadense - A
Sisyrinchium bermudiana - V
Smilax pseudo-china - V
Smyrnium aureum - A
Solidago canadensis - C, V
Sonchus canadensis - C
Sophora tinctoria - V
Spiraea opulifolia - C, V
Spiraea trifoliata - C, V
Thapsia trifoliata - V

Tragopogon virginicum - C, V
Trifolium biflorum - C, V
Ulmus americana - V
Uniola spicata - A
Urtica cylindrica - C, V
Urtica pumila - C
Utricularia subulata - V
Uvularia perfoliata - C, V
Vaccinium frondosum - A
Vaccinium stamineum - A
Veratrum luteum - C, V
Viburnum acerifolium - V
Viburnum prunifolium - C, V
Viola pedata - V
Vitis vinifera - N
Xyris indica - N

As can be seen from the above summary, Linnaeus had both Clayton and Kalm material for 170 species, of which 8 were referred only to Canada, 79 only to Virginia, and only 22 to America. A total of 47 species were referred to Canada and Virginia, 7 to Pennsylvania and Virginia, and one to New York and Virginia. As Kalm material came into Linnaeus' possession well after he had formulated many of his opinions regarding species, it is not unusual to see a debate in the literature over the selection of a Clayton specimen or a Kalm collection as a suitable lectotype. This cannot be resolved at this point, but it is well to consider that while in many instances Linnaeus does not give Canada or Pennsylvania as the only location for a combination Clayton-Kalm species, he does give many species with Virginia as the only location. It is possible, therefore, that Linnaeus had already established the definition of the species on material other than the Kalm collection in his herbarium. Thus, while he used Kalm specimens to assist him in his characterization, he likely did not base his circumscription initially upon that Kalm collection.

When Linnaeus wrote *Species plantarum* in 1753, some

species from temperate North America were described based only upon a single reference and/or collection. Of these, the majority are, as one would suspect, Clayton or Kalm specimens. The following breakdown is based solely upon single author or collector references in *Species plantarum*. In those instances where there is a specimen in the Linnaean Herbarium in London that seems to be different from the author of the synonym or the collector mentioned in the reference given by Linnaeus, a star (*) is given. The reader is urged to consult *Species plantarum* for the places of publication.

Bauhin

Othonna cineraria

Catesby

Annona glabra
*Annona triloba**
Bignonia caerulea
Cissampelos smilacina
Ipomoea carolina
Magnolia virginiana
 var. *tripetala*
Pancratium carolinianum
Philadelphus inodorus
Sloanea emarginata
*Smilax tamnoides**
*Viscum purpureum**
Viscum rubrum

Clayton

*Agrostis virginica**
Alisma subulata
Amaranthus graecizans
Ammannia ramosior
Andropogon divaricatum
*Antirrhinum canadense**
*Arabis lyra**
Asclepias rubra
*Aster concolor**
Aster rigidus
Aster vernus
*Betula lenta**
Buchnera americana
Chironia dodecandra
Convolvulus panduratus
*Convolvulus spithameus**
Coreopsis angustifolia
*Crateagus tomentosa**
Crataegus viridis

*Cynoglossum virginianum**
*Dactylis cynosuroides**
*Dianthera americana**
*Dirca palustris**
Dolichos polystachyus
Dolichos regularis
Elephantopus tomentosus
Elymus hystrix
Ferula canadensis
*Glycine bracteata**
Gratiola dubia
*Gratiola virginiana**
Hedysarum frutescens
*Hedysarum hirtum**
Hedysarum nudiflorum
*Hedysarum repens**
*Hedysarum violaceum**
*Hedysarum virginicum**
Hedysarum viridiflorum
Helianthus laevis
*Hieracium gronovii**
Holcus laxus
Holcus striatus
*Hydrangea arborescens**
*Hyoseris virginica**
*Hypericum muticum**
*Ipomoea nyctelea**
*Iris virginica**
Laurus aestivalis
Leontodon dandelion
*Linum virginianum**
Lycopsis virginica
*Lycopus virginicus**
Lythrum lineare
Lythrum petiolatum
*Lythrum verticillatum**
*Melanthium virginicum**
Melissa pulegioides
*Mespilus canadensis**
*Monarda clinopodia**
Orchis flava
Orchis spectabilis
Ornithogalum bivale
Osmunda claytoniana
*Panicum dichotomum**
Panicum virgatum
*Phalaris oryzoides**
Polemonium dubium
*Prinos verticillatus**
*Pteris atropurpurea**
*Pyrus coronaria**
*Queria canadensis**
*Rhinanthus virginica**
Rudbeckia oppositifolia
Rumex verticillatus
Sagina virginica
Salicornia virginica
*Schoenus glomeratus**
*Scirpus capitatus**
Sigesbeckia occidentalis

<i>Silene virginica</i> *	<i>Carex squarrosa</i>
<i>Silphium solidaginoides</i>	<i>Chenopodium virginicum</i>
<i>Smyrnium integerrimum</i>	<i>Chironia angularis</i>
<i>Sonchus canadensis</i> *	<i>Chironia campanulata</i>
<i>Stipa avenacea</i>	<i>Chrysocoma graminifolia</i>
<i>Swertia difformis</i>	<i>Cinna arundinacea</i>
<i>Teucrium virginicum</i>	<i>Cistus canadensis</i>
<i>Thapsia trifoliata</i> *	<i>Dalibarda repens</i>
<i>Tragopogon virginicum</i> *	<i>Datisca hirta</i>
<i>Ulmus americana</i> *	<i>Erigeron philadelphicum</i>
<i>Uniola spicata</i> *	<i>Galium tinctorium</i>
<i>Urtica pumila</i> *	<i>Galium trifidum</i>
<i>Utricularia gibba</i> *	<i>Gentiana quinquefolia</i>
<i>Urticularia subulata</i>	<i>Gentiana villosa</i>
<i>Vaccinium frondosum</i> *	<i>Helianthus decapetalus</i>
<i>Verbesina virginica</i>	<i>Hieracium kalmii</i>
<i>Veronica marilandica</i>	<i>Hieracium paniculatum</i>
<i>Viburnum acerifolium</i> *	<i>Hippophae canadensis</i>
<i>Viburnum nudum</i>	<i>Hordeum jubatum</i>
<i>Viola primulifolia</i> *	<i>Hydrocotyle americana</i>
<i>Xyris indica</i> *	<i>Hypericum canadense</i>
 Collinson	<i>Hypericum kalmianum</i>
<i>Podophyllum diphyllum</i> *	<i>Liquidambar peregrina</i>
 Colden	<i>Mentha canadensis</i>
<i>Uvularia sessilifolia</i> *	<i>Ophrys cernua</i>
 Dillenius	<i>Panicum filiforme</i>
<i>Asclepias amoena</i>	<i>Polygala sanguinea</i>
<i>Aster miser</i>	<i>Polygonum articulatum</i>
<i>Carduus altissimus</i>	<i>Polygonum erectum</i>
<i>Chenopodium anthelminticum</i> *	<i>Polygonum pensylvanicum</i>
<i>Clematis crispa</i> *	<i>Polypodium marginale</i>
<i>Convolvulus carolinus</i>	<i>Polypodium noveboracense</i>
<i>Crotalaria perfoliata</i>	<i>Potentilla canadensis</i>
<i>Ipomoea lacunosa</i>	<i>Prinos glaber</i>
<i>Ipomoea tannifolia</i>	<i>Ribes cynosbati</i>
<i>Lycopodium apodium</i> *	<i>Rubus canadensis</i>
<i>Lycopodium carolinianum</i>	<i>Rubus hispida</i>
<i>Lycopodium obscurum</i> *	<i>Sambucus canadensis</i>
<i>Polemonium rubrum</i> *	<i>Senecio canadensis</i>
<i>Rosa carolina</i> *	<i>Smilax caduca</i>
<i>Ruellia biflora</i>	<i>Smilax rotundifolia</i>
<i>Solanum nigrum</i>	<i>Solidago lateriflora</i>
var. <i>virginicum</i>	<i>Thalictrum dioicum</i>
<i>Trichostema brachiatum</i> *	<i>Urtica capitata</i>
<i>Triosteum perfoliatum</i>	<i>Vaccinium album</i>
 Kalm	<i>Vaccinium corymbosum</i>
<i>Acer pensylvanicum</i>	<i>Vaccinium ligustrinum</i>
<i>Acer saccharinum</i>	<i>Vaccinium mucronatum</i>
<i>Allium canadense</i>	<i>Viburnum lentago</i>
<i>Amaranthus retroflexus</i>	<i>Viscum terrestrae</i>
<i>Andromeda racemosa</i>	 Linnaeus
<i>Aster laevis</i>	<i>Cacalia suaveolens</i>
<i>Avena pensylvanica</i>	<i>Gomphrena serrata</i>
<i>Avena spicata</i>	<i>Guilandina dioica</i>
<i>Bromus ciliatus</i>	<i>Helleborus trifolius</i>
<i>Carex folliculata</i>	<i>Lechea major</i>

Physalis pruinosa
*Polymnia canadensis**
Rumex persicarioides
Salsola prostrata
Solidago noveboracensis
*Swertia corniculata**
Thalictrum purpurascens
Viburnum dentatum
*Viola canadensis**
*Viola lanceolata**

Mitchell

*Chelone penstemon**

Morison

*Helianthus divaricatus**

Petiver

Clitoria mariana

Plukenet

*Anemone quinquefolia**
Ascyrum villosum
Aster mutabilis
*Aster tenuifolius**
*Conzya asteroides**
Conzya bifrons var. *flosculosa*
Conzya linifolia
*Cupressus thyoides**
Euphorbia maculata
*Morus rubra**
*Phlox divaricata**
*Phlox ovata**
*Phlox paniculata**
Phlox setacea
Phlox subulata
Rhexia mariana
*Scirpus retrofractus**
*Solidago latifolia**
Spiraea tomentosa
*Thesium umbellatum**
*Urtica divaricata**

Plumier

Silphium laciniatum

Ray

Magnolia virginiana
 var. *grisea*
*Phlox maculata**
*Polygala incarnata**

Tournefort

*Lobelia kalmii**

van Royen

Bidens bullata
Gomphrena interrupta

Of the some 889 species

credited to temperate North America by Linnaeus in the first edition of *Species plantarum*, 241, or about 27% were based on a single reference. In giving a single reference, Clayton material is mentioned for 100 species and Kalm for 60 species. For 49 of the 100 Clayton species, Linnaeus had other specimens. In nearly all instances, the additional material was a Kalm collection which is now found in Linnaeus' herbarium in London.

For the remaining names based on a single reference, the majority were established on illustrations in books published by the authors mentioned above. Linnaeus credits Catesby as the basis of 12 of his species. In three instances Linnaeus had other material in his herbarium to augment the illustrations published by Catesby. As for Dillenius, who Linnaeus mentions as his only reference for 18 species, he had other material for seven of those species. Plukenet is mentioned as Linnaeus' only source of information for 21 species. Of that number, however, Linnaeus had additional material in only 11 instances. All of these authors illustrated their works, true, but it is significant that of these particular authors -- Catesby, Dillenius and Plukenet -- Linnaeus may well have been able to examine actual specimens as well as the illustrations. Collections at the University of Oxford are extant with many of the polynomials mentioned by Linnaeus in synonymy, and it is likely that Linnaeus was able to associate specific names with certain species only as a result of his examination of the Sherardian and Dellinian herbaria at Oxford.

It is significant that by the late 1740s when Mitchell published his work on new

genera that Linnaeus had additional information relative to all but one. Mitchell is cited 13 times in the first edition of *Species plantarum*, but only once is he the sole source of information. This is the case of *Chelone penstemon*, a plant Mitchell proposed to recognize as a new genus, *Penstemon*. Even so, Linnaeus had other specimens at hand and did not need to rely only upon Mitchell's publications. As for van Royen who Linnaeus assisted, he gives him as the only reference in two species; in neither case did Linnaeus have supplementary material in his herbarium.

As already noted, Linnaeus was unable to see the original herbarium material gathered by a number of workers. Thus, he had to rely upon the illustrations prepared by these workers for the characterization and identification of many species.

For his study of temperate North American species, the work of Gronovius proved particularly significant. Not only did Linnaeus examine the collections made by Clayton which were described in the 1739 part of *Flora virginica*, but he aided Gronovius in the determination of synonyms. Additionally, Linnaeus received many subsequent specimens from Gronovius of Clayton's Virginia discoveries, and these too were evaluated by him and synonymies determined. Of specific interest is the relationship between the Gronovius flora and those works on American botany published prior to 1739.

In the following listing, Gronovius citations given by Linnaeus in the first edition of *Species plantarum* are reviewed, and the synonyms cited by both Gronovius and Linnaeus are listed for each species.

The following abbreviations are used: BR = Breynius; CA = Catesby; CM = Commelinus; CO = Cornuti; D = Dillenius; H = Hermann; LA = Lafitau; L = Linnaeus' *Hortus cliffortianus*; LT = Leat; LV = Linnaeus' *Viridarium cliffortianum*; MA = Martyn; MO = Morison; PE = Petiver; PL = Plukenet; PU = Plumier; RA = Ray; RO = Royen; S = Sloane; T = Tourenfort; V = Vaillant. Only those species considered by Linnaeus to be strictly New World will be evaluated. A star (*) indicates when Gronovius and the additional reference(s) cited by Linnaeus are the only synonyms given in the first edition of *Species plantarum*. Those works published after 1739 or 1743, depending on the page in Gronovius, are not considered in this review.

- Acer negundo - L
- Acer rubrum - CA, PL
- Acrostichum areolatum - PE*
- Acrostichum platyneuros - PL
- Actaea racemosa - D
- Adiantum pedatum - CO
- Ageratum altissimum - L
- Aletris farinosa - PL*
- Amaryllis atamasca - MO
- Ambrosia trifida - L
- Anchusa virginiana - MO, PL*
- Andromeda arborea - CA*
- Andromeda mariana - PL*
- Andromeda paniculata - L, PL
- Andropogon virginicum - RO*
- Anemone virginiana - RO
- Annona muricata - L, PL
- Apocynum cannabinum - PL
- Aquilegia canadensis - CO
- Aralia spinosa - L, LV
- Arethusa bulbosa - PL*
- Arethusa divaricata - CA*
- Arethusa ophioglossoides, L
- PL
- Aristolochia serpentaria - CA, PL
- Arum triphyllum - MO
- Arum virginicum - L*
- Asarum canadense - CO
- Asarum virginicum - PL
- Asclepias decumbens - PE*
- Asclepias incarnata - CO, L
- Asclepias nivea - D
- Asclepias syriaca - CO, L
- Asclepias verticillata - PE,

PL*

Ascyrum hypericoides - PL,
RA

Aster divaricatus - PL*

Aster dumosus - L

Aster ericoides - D*

Aster grandiflorus - D

Aster novae-angliae - H, L*

Azalea lutea - L

Baccharis halimifolia - L

Bartsia coccinea - L, MO

Bignonia radicans - CA, L

Buphthalmum frutescens - CA,
D, L

Buphthalmum helianthoides - PL

Burmannia biflora - L*

Cacalia atriplicifolia - PL

Callicarpa americana - CA

Campanula perfoliata - L, MO*

Carduus virginianus - MO

Cassia chamaecrista - BR, L

Cassia ligustrina - D, L

Ceanothus americanus - CM, L

Celosia paniculata - S

Celtis occidentalis - RA*

Cenchrus tribuloides - MO

Cephalanthus occidentalis - L

Cercis canadensis - L

Chelone glabra - L, T

Chelone hirsuta - PL, RA*

Chionanthus virginica - L

Chrysogonium virginianum - L

Cicuta bulbifera - RA*

Cicuta maculata - MO, PL*

Claytonia virginica - PL

Clematis viorna - D

Clitoria virginiana - D*

Commelina communis - L

Convallaria racemosa - L

Convolvulus repens - PU*

Coreopsis auriculata - PL

Coreopsis verticillata - PL,
V*

Cornus florida - L

Cracca virginiana - L, PL*

Crataegus coccinea - L

Crotalaria sagittalis - L, PL

Cucubalus stellatus - RA*

Cupressus distichia - CA, L

Cuscuta americana - S*

Cynanchum suberosum - D, L

Cyperus arundinacea - MO, PL*

Cyperus odoratus - RO

Diodia virginiana - L*

Dioscorea villosa - PL*

Diospyros virginiana - CA, L

Epigaea repens - PL

Erigeron canadense - L, MO

Eriocaulon decangulare - PE,
PL*

Eriophorum virginicum - MO,
PL*

Eryngium aquaticum - PL*

Eryngium foetidum - L

Eupatorium aromaticum - PL

Eupatorium coelestinum - D

Eupatorium perfoliatum - L

Eupatorium purpureum - CO

Eupatorium scandens - L, PL*

Euphorbia polygonifolia - RA*

Euonymus americanus - PL

Fagus pumila - CA, PL*

Fraxinus americana - CA*

Fumaria cucullaria - L

Galium bermudense - PL, RA*

Gentiana saponaria - CA, MO*

Geranium carolinianum - D*

Geranium maculatum - D*

Gerardia flava - RA

Gerardia pedicularia - PL

Gerardia purpurea - PL, RA*

Geum virginianum - H, L*

Glechoma triacanthos - L

Glycine apios - CO, L

Glycine comosa - PE*

Glycine tomentosa - D*

Gnaphalium plantaginifolium -
PL*

Gnaphalium purpureum - D, RO

Hamamelis virginiana - PL*

Hedera quinquefolia - CO, L

Hedysarum canescens - L

Hedysarum paniculatum - PL*

Helenium autumnale - L, PL

Helianthus angustifolius - PE*

Helianthus atrorubens - D*

Heuchera americana - L

Hibiscus moscheutos - L

Hieracium venosum - PL, RA*

Houstonia caerulea - L

Houstonia purpurea - RA

Hydrophyllum virginianum - L

Hyssopus nepetoides - L, LV

Iris verna - PL*

Iva frutescens - L

Juglans nigra - L

Juniperus virginiana - L

Kalmia angustifolia - PL*

Kalmia latifolia - PL

Laurus benzoin - L

Laurus borbonia - CA, L*

Laurus indica - L

Laurus sassafras - L, PL

Lechea minor - RA*

Ligusticum scoticum - L

Limodorum tuberosum - MA*

Liquidambar styraciflua - CA,
L

Liriodendron tulipifera - H, L

Lithospermum virginianum - MO*

Lobelia cardinalis - L
Lobelia cliffortiana - L
Lonicera marilandica - CA, RA*
Lonicera symphoricarpos - D, L
Ludwigia alternifolia - L
Lupinus perennis - MO, RO*
Lycopodium alopecuroides - L, MO
Lysimachia quadrifolia - PE
Magnolia virginiana - L*
Magnolia virginiana var. *acuminata* - CA*
Magnolia virginiana var. *foetida* - CA
Medeola virginiana - PL*
Medicago virginica - PL*
Melothria pendula - L
Menispermum canadense - L
Menispermum virginicum - D*
Mitchella repens - CA, PE, PL*
Mollugo verticillata - PL
Monarda ciliata - MO, PL*
Monarda punctata - L
Monotropa uniflora - CA, MO
Myosotis virginiana - PL*
Myrica asplenifolia - L
Myrica cerifera - CA, L, PL*
Nepeta virginica - L
Nyssa aquatica - CA, L
Obolaria virginica - L, PL
Oldenlandia uniflora - PL*
Onoclea sensibilis - L, PL
Ophiorrhiza mitreola - L*
Orchis ciliaris - RO
Orobanche uniflora - PL*
Orobanche virginiana - MO, RA*
Osteospermum uvedalia - L
Oxalis stricta - T
Panax quinquefolius - LA, V
Panax trifolius - PL, V*
Panicum capillare - S*
Parthenium integrifolium - D, L
Passiflora lutea - L
Phlox glaberrima - D, L*
Physalis viscosa - D, L*
Phytolacca americana - L
Pinus balsamea - PL
Pinus taeda - PL
Plantago virginica - MO, PL, RA*
Platanus occidentalis - CA, L
Poa flava - PE*
Podophyllum peltatum - CA, L
Polygonum sagittatum - L, LA
Polygonum virginianum - L
Pontederia cordata - L
Prenanthes alba - L
Pulmonaria virginica - MO, PL*
Pyrola maculata - PL
Quercus alba - CA*
Quercus nigra - CA, RA*
Quercus phellos - CA, RA
Quercus prinus - CA, L
Quercus rubra - CA, PL
Ranunculus abortivus - H
Renealmia usneoides - L, PE, S
Rhus copallinum - PL
Rhus glabra - D, L
Rhus radicans - D, L
Rhus toxicodendron - T
Rhus vernix - D, L
Robinia pseudoacacia - L
Rudbeckia laciniata - CO, L, LV
Rudbeckia purpurea - CA, PL
Ruellia strepens - D, L*
Salvia urticifolia - MO*
Sanguinaria canadensis D, L
Sanicula canadensis - T
Sanicula marilandica - RA
Sarothra gentianoides - PL*
Sarracenia flava - CA, L
Sarracenia purpurea - CA, L
Satureja origanoides - MO, PL*
Satureja virginiana - H, L
Saururus cernuus - L
Saxifraga pensylvanica - D
Scandix procumbens - MO*
Schwalbea americana - PL*
Scirpus spadiceus - S*
Scrophularia marilandica - RA*
Scutellaria hyssopifolia - PE*
Scutellaria integrifolia - PL, RA*
Scutellaria lateriflora - MO*
Senecio aureus - MO, RA*
Serratula glauca - D
Serratula spicata - D
Serratula squarrosa - D
Silene antirrhina - D*
Silphium asteriscus - D, L*
Silphium helianthoides - PL*
Sison canadense - L
Sisyrinchium bermudiana - D, L
Sium rigidus - MO*
Smilax lanceolata - L
Smilax laurifolia - CA*
Smilax pseudo-china - L
Smilax sarsaparilla - L
Smyrnium aureum - PL
Solidago canadensis - L
Solidago sempervirens - H
Sophora tinctoria - PL*
Spiraea opulifolia - L
Spiraea trifoliata - L, PL

Tetragonotheca helianthoides -
 D*
Tiarella cordifolia - L
Tradescantia virginiana - L
Trifolium reflexum - PL*
Trillium sessile - CA, PL*
Vaccinium stamineum - PL*
Valeriana locusta var. *radiata*
 - RA*
Verbena urticifolia - L
Verbesina alba - D, L
Veronica virginica - L*
Viola palmata - PL*
Viola pedata - PE, PL*
Yucca filamentosa - MO, PL*

When Linnaeus proposed species in the first edition of *Species plantarum* he used, to a significant degree, information already published by others who proceeded him. During an examination of the Linnaean references relating to the State of Maryland published in the first two editions of his book, it was discovered that Linnaeus used the herbarium collections at Oxford to augment his understanding of temperate North American botany to a degree not previously realized. The knowledge which Linnaeus gained at Oxford was almost immediately expressed in Gronovius' *Flora virginica* which Linnaeus worked on soon after his departure from England in the late summer of 1736. This is probably equally true for regions in North America other than Maryland. It is not the purpose of this review to attempt a combined examination of this problem using both Linnaeus' published works and the Sherardian and Dillenian herbaria at the University of Oxford. However, the following list may prove helpful for those who are investigating potential lectotypes for species which might be found at Oxford. This in no way should be construed as a statement of affirmation that such authentic material is actually present. It should be remembered that other Linnaean material

is located in Sweden and in the British Museum (Natural History) in London. These collections are not considered in this listing. Many of these species are based, in part, upon Clayton material. Authentic Clayton specimens are to be sought at the British Museum (Natural History).

A star (*) is added to those species which are also based on Clayton collections cited by Gronovius.

*Acrostichum areolatum**
*Acrostichum platyneuros**
Actaea spicata var. *alba*
*Andromeda arborea**
Annona glabra
Annona triloba
*Asarum virginicum**
Asclepias amoena
*Asclepias decumbens**
Asclepias variegata
Ascyrum villosum
Aster miser
Aster mutabilis
Astragalus carolinianus
*Baccharis foetida**
Bignonia caerulea
Bignonia sempervirens
Carduus altissimus
*Carduus virginianus**
Cissampelos smilacina
Clinopodium rugosum
Clitoria mariana
*Clitoria virginiana**
Convallaria stellata
Convolvulus carolinus
Conyza bifrons var. *flosculosa*
Conyza linifolia
*Coreopsis auriculata**
*Cyperus arundinacea**
*Dioscorea villosa**
Eupatorium hyssopifolium
Euphorbia maculata
*Galium bermudense**
*Glycine tomentosa**
*Helianthus angustifolius**
*Hieracium venosum**
Horminum virginicum
*Hypericum setosum**
Ipomoea carolina
Ipomoea lacunosa
Ipomoea tannifolia
Iris versicolor
*Lonicera marilandica**
Lycopodium carolinianum

Magnolia virginiana
 var. *acuminata**
Magnolia virginiana
 var. *foetida**
Magnolia virginiana
 var. *grisea*
Magnolia virginiana
 var. *tripetala*
*Medicago virginica**
*Monarda ciliata**
*Orobanche uniflora**
Pancratium carolinianum
Phaseolus helvulus
Philadelphus inodorus
Phlox pilosa
Phlox setacea
Pistacia simaruba
*Poa flava**
Polemonium rubrum
*Polygonia cruciata**
Polypodium virginianum
*Prenanthes alba**
Rhexia mariana
Ribes oxyacanthoides
*Sanicula marilandica**
*Scandix procumbens**
*Schwalbea americana**
*Serratula glauca**
*Silphium helianthoides**
Sloanea emarginata
Smilax bona-nox
Solanum nigrum
 var. *virginicum*
Solidago caesia
Thalictrum cornutum
*Tilia americana**
Trifolium comosum
*Triosteum angustifolium**
Triosteum perfoliatum
Valeriana locusta
 var. *radiata**
Viscum rubrum
Yucca filamentosa

Of the 81 entities that might have authentic material found in the Sherardian and Dillenian herbaria at the University of Oxford, 33 are also based on Clayton specimens. Three major pre-Linnaean authors have major sets of their collections at Oxford. Of the three, Catesby, Dillenius and Morison, Catesby and Dillenius are the only authors or herbaria Linnaeus seems to have consulted (both of these men have their collections in the Sherardian Herbarium). The

following 12 species cited by Linnaeus might have voucher specimens at Oxford to go with the illustrations published by Catesby:

Annona glabra
Annona triloba
Bignonia caerulea
Bignonia sempervirens
Cissampelos smilacina
Ipomoea carolina
Magnolia virginiana
 var. *tripetala*
Pancratium carolinianum
Philadelphus inodorus
Pistacia simaruba
Sloanea emarginata
Viscus rubrum

Dillenius specimens should be consulted for the following species which should be considered in addition to the published illustrations when proposing lectotypes. A total of 19 species are listed:

Asclepias amoena
Asclepias variegata
Aster miser
Astragalus carolinianus
Carduus altissimus
Clinopodium rugosum
Convolvulus carolinus
Eupatorium hyssopifolium
Horminum virginicum
Ipomoea lacunosa
Ipomoea tannifolia
Iris versicolor
Lycopodium carolinianum
Phaseolus helvulus
Polemonium rubrum
Ribes oxyacanthoides
Solidago caesia
Solanum nigrum
 var. *virginicum*
Triosteum perfoliatum

Morison (and in the case of most temperate North American species, this includes Bobart) the following species should be considered in addition to the published illustrations. A total of 5 species are listed below.

Actaea spicata var. *alba*
Convallaria stellata

Eupatorium hyssopifolium
Polypodium virginianum
Thalictrum cornutii

Other authors occasionally sent specimens to Sherard and Dillenius, or these two men annotated specimens they received from various naturalists, with polynomials that could have been observed when Linnaeus examined the Oxford collections. Polynomials published by Ray, Plukenet and Petiver are on such specimens. The following Linnaean species have polynomials proposed by these men given in synonymy, and such names may be on specimens found in the Sherardian and Dillenian herbaria at the University of Oxford. PE= Petiver; PL= Plukenet; R= Ray.

Asclepias variegata - PL
Ascyrum villosum - PL
Aster mutabilis - PL
Bignonia sempervirens - PL, R
Clinopodium rugosum - PL, R
Clitoria mariana - PE
Conzya bifrons var. *floscula*
 - PL
Conzya linifolia - PL
Eupatorium hyssopifolium -
 PL, R
Euphorbia maculata - PL
Horminum virginicum - PL
Magnolia virginiana
 var. *grisea* - R
Phlox pilosa - PL, R
Phlox setacea - PL
Polypodium virginianum - PE,
 R
Rhexia mariana - PL
Ribes oxyacanthoides - PL
Smilax bona-nox - PL
Solidago caesia - R
Trifolium comosum - PE

For Linnaeus, the botanical explorations that occurred in temperate North America prior to 1753 were significant to him. He never saw the New World himself and had to rely upon the efforts of others to provide him with information. This came in the form of dried herbarium specimens, seeds and fruits that resulted in culti-

vated plants he could examine, and publications he could read and study. Many of the herbarium specimens seen by Linnaeus were gathered by John Clayton and Peter Kalm. Of the 889 species and varieties described by Linnaeus in the first edition of *Species plantarum* in 1753, at least 586 entities, or 66%, were based on their collections. This includes 551 species for which there are Clayton specimens, 205 species for which there are Kalm specimens, and 170 species which were gathered by both men. Of the remaining 303 species, Linnaeus has material (mostly garden specimens or collections which cannot be determined as to collector) for some 250 of those species. The following species do not seem to have obvious specimens immediately available to Linnaeus. A star (*) indicates those species which are not illustrated.

Annona glabra
*Arnica maritima**
Asclepias amoena
Asclepias variegata
Aster miser
Aster mutabilis
Astragalus carolinianus
Bignonia caerulea
Bignonia sempervirens
Carduus altissimus
Cissampelos smilacina
Clinopodium rugosum
*Clitoria mariana**
Convallaria stellata
Convolvulus carolinus
Conzya bifrons
 var. *flosculosa*
Conzya linifolia
Eupatorium hyssopifolium
Euphorbia maculata
*Gomphrena interrupta**
*Gomphrena serrata**
*Guilandina dioica**
*Holesteum succulentum**
Horminum virginicum
Hypericum lasianthus
Ipomoea carolina
Ipomoea lacunosa
Ipomoea tannifolia
Iris versicolor

*Lilium camschatcense**
Lycopodium carolinianum
Magnolia virginiana
 var. *grisea**
Magnolia virginiana
 var. *tripetala*
*Othonna cinneraria**
Pancratium carolinianum
Phaseolus helvulus
Philadelphus inodorus
Phlox pilosa
Phlox setacea
Pistacia simaruba
Polemonium rubrum
Polypodium virginianum
Prenanthes altissima
Rhexia mariana
Ribes oxyacanthoides
Sloanea emarginata
Smilax bona-nox
Solanum nigrum
 var. *virginicum*
Solidago caesia
Thalictrum cornutii
*Trifolium comosum**
Triosteum perfoliatum
Viscum rubrum

CONCLUSIONS

Linnaeus left an impressive record of accomplishments when he died in 1778. His impact has extended far beyond his own life time, and today, the works of Carl Linnaeus are as critical to botanists now as they were at the time they were published. In the present review of just one publication -- the first edition of *Species plantarum* -- it can be seen that not only is this publication itself important, but the basis upon which it was established reflects Linnaeus' premier position within the botanical community. This becomes obvious when one realizes that Linnaeus had access, directly through specimens and indirectly through the literature, to a large percentage of

the world's flora in 1753. No doubt Linnaeus was a man of tremendous industry. He had the time and opportunity to work on projects he deemed important. He had the support of a large number of his colleagues, although many did not accept his general views as expressed in his sexual system of classification. Linnaeus revolutionized systematic botany by his consistent use of binomials. Not only did Linnaeus make it simpler to index names -- as was his intention -- he also made it more convenient for people of lesser intellect to remember scientific names.

What can be seen from this review of the temperate North American flora as reported in 1753 by Linnaeus is that he depended upon a great number of people to provide him with descriptions, illustrations, seeds and specimens. His place in the history of science is well established and shall not be diminished with time. That position does rest, however, upon the energies and even the lives of a host of men and women willing to face the unknown to discover the unseen so that he might inform the world of the existence of new species of plants. Time has not changed that fact. Today, we too fully depend upon the efforts of the many past generations of naturalists for our understanding of the living world. It is hoped that this review will remind the modern plant taxonomist that the history of systematic botany began long before 1753 and the first edition of *Species plantarum*.

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